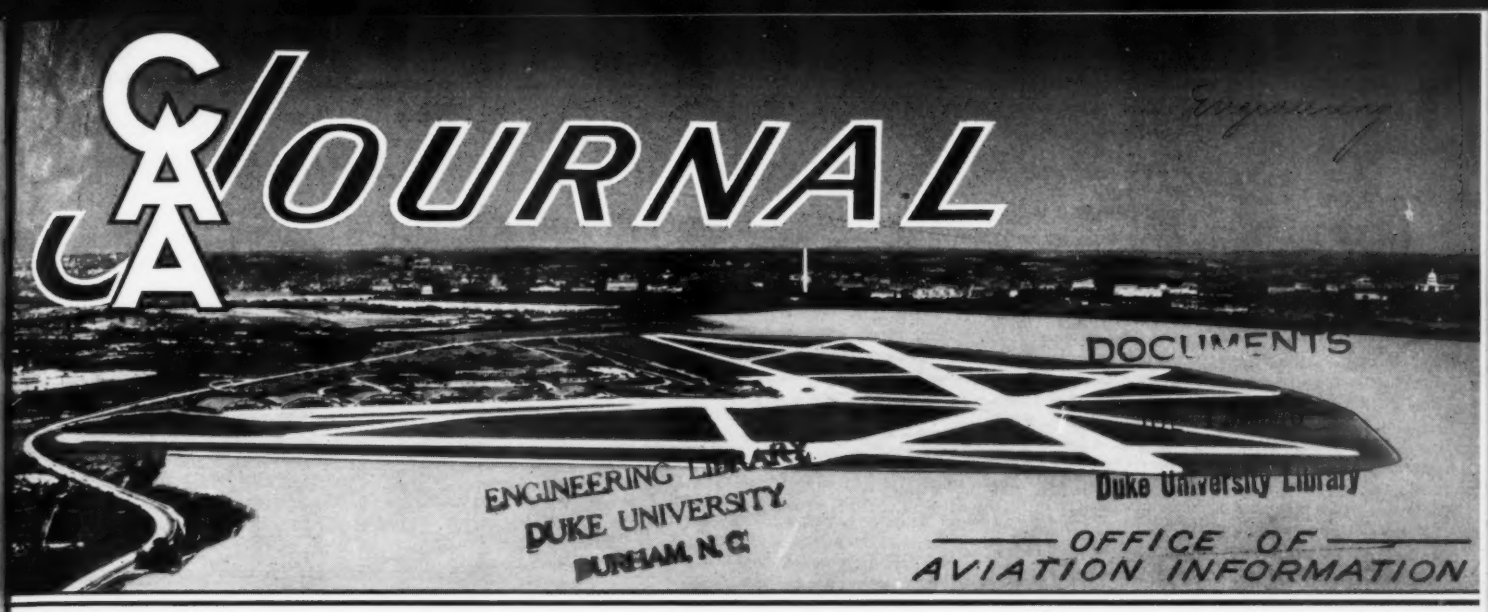
CAA JOURNAL



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CAB Sets Up Safety Rules For Nonscheduled Carriers

Nonscheduled air carriers engaged in interstate, overseas and foreign operations are to be brought into the licensed operator category, at least for safety purposes, under a new set of rules, Part 42, established by the Civil Aeronautics Board.

CAA to Issue Certificates—The new Part 42, effective August 1, sets up for the first time special operating standards and safety rules for the nonscheduled air carriers, and will require them to hold air carrier operating certificates issued by the Civil Aeronautics Administration. The certificates will describe the particular nonscheduled operation authorized for each applicant and prescribe the operating specifications and limitations required for safety.

Under the "grandfather clause" included in the Part, an air carrier in operation who applies for a certificate before August 1 will be permitted to continue his activities until the CAA has passed on his application.

Growing Business—The nonscheduled branch of the air transport industry has been growing in size since VJ-Day and developing business in free lance passenger and freight hauling. Equipment used ranges from a single light plane to a fleet of 4-engined transports, and services reach overseas countries.

These nonscheduled carriers, who recently formed their own national organization, the Institute of Air Transportation, went on record in favor of CAB and CAA regulation at their first convention last month in New York City. Prevailing sentiment among the 100 representatives of charter operations who attended the meeting was that federal regulation will bring them official recognition as a class of carriers and will increase public confidence in the safety of their services.

Rules General—In their present form the rules provide minimum aircraft, pilot and operations requirements, leaving the CAA leeway in applying them to individual cases. Aside from the plane airworthiness requirement, for instance, the CAA may specify the type and class which it considers safe for the service offered.

The CAA may also deviate from any specific requirement in the Part for a particular operation or class of operations, when general safety standards require or permit this departure.

Experience in regulating this widely varying type of activity will show where revisions are needed, the Board pointed out, and indicated that its Safety Bureau will work closely with the CAA in continuing study of the wide development expected in this phase of the aviation industry.

The initial effort to draw up Civil Air Regulations for nonscheduled air carriers commenced in 1941 with the circulating of a CAA Safety Regulation Release. Action was postponed, however, until civil aviation, curtailed at that time by wartime conditions, returned to more normal operations.

About 2,730 Operators—In preparing to enforce the new safety regulations for nonscheduled air carriers, the Civil Aeronautics Administration has estimated that there are at least 2,730 such operators with 5,529 aircraft.

Figures submitted by the CAA in connection with a budget request for enforcement funds show there are about nine times as many aircraft engaged in nonscheduled operations as are now in use by the sched-

(See page 73)

CAA Towers Guard VHF Radio Band For Private Fliers

Private fliers with very high frequency radio equipment can now be assured of widespread airport control tower service. Sixty-two CAA towers are now guarding the 131.9 megacycle channel for private fliers.

Use of very high frequency equipment offers freedom from static and better "readability" under bad weather conditions.

Eventually, all private planes will use radio channels in the vicinity of 131.9 megacycles. The changeover from low frequency will be gradual, however, and tower transmissions will continue on both low and very high frequencies for several years.

A pilot equipped with a VHF transmitter can call the tower as usual and receive replies on a low frequency 200-400 kc. receiver. A few ground-to-plane transmissions are now being made on VHF channels between 118 and 122 mc. Eventually, the low frequency ground replies will be discontinued, and private fliers will use receivers as well as transmitters in the VHF portion of the spectrum.

Cost to You for All CAA Activities Is 17 Cents a Year, Burden States

The sum total of the money appropriated for the CAA and its predecessor agencies for federal regulation and promotion of aviation since 1926 has cost each person in the United States an average of only 17 cents a year, William A. B. Burden, Assistant Secretary of Commerce, said in an address broadcast over a nation-wide network hook-up May 25.

Mr. Burden's address, which was a highlight of the Aviation Writers Association convention at Indianapolis, had to be delivered by a special hook-up from Montreal, Canada, because of need for his presence there as Chairman of the United States delegation to the Provisional International Civil Aviation Organization.

By taking into account the entire amount of federal funds spent in developing civil aviation since 1918, including even the sums expended for airports as part of the relief program during the depression, the average cost to each of us has been only 25 cents.

Taking inventory on the returns this 17 cents a year has brought, Mr. Burden said that already the government can show a profit on air mail, for the total payments to the airlines have been more than recovered in postal revenue. In 1939, last normal prewar year, the airlines and aircraft manufacturers alone paid federal taxes amounting to more than 70 percent of the CAA appropriation.

Everybody Uses Airlines—"Aviation is no longer a specialized business serving the few," he said.

"Last year more than 8 million Americans rode the airlines. Among these were businessmen seeking to get reconversion moving rapidly; statesmen on missions of world reconstruction; veterans returning to their homes and ordinary John Public. What a contrast with 1926, the government's first year of fostering and regulating civil aviation, when only 5700 passengers were carried!

"In 20 years civil aviation has grown to the point where it is both a great industry in itself, and an important factor in expanding and speeding up the operations of our entire economic system. Today it employs perhaps 300,000 people. This is about 30

(See page 76)

State-Federal Agreement Reached On Model State Aviation Law

Procedure for cooperation between states and the federal government in the field of safety regulations has been worked out, T. P. Wright, Administrator of Civil Aeronautics, has announced.

Representatives of the CAA and the National Association of State Aviation Officials recently completed a lengthy conference at which complete agreement was reached on a model state aviation law to be known as State Aeronautics Commission or Department Act. This act would provide for the establishment in each state adopting it of a full-time organization to administer its provisions, and would make it unlawful to operate aircraft in a reckless manner or in a manner which unnecessarily disturbs the public peace and quiet.

The act was presented to the Civil Aviation Legislative Council at a meeting on May 24 for discussion and comment.

State Penalties—By making it unlawful to fly recklessly, the legislation would provide an effective means whereby the state adopting it could curb and punish reckless fliers within its limits. Penalties could include (1) fine; (2) imprisonment; (3) grounding; and violators would be prosecuted by state and local police, with penalties imposed by state and local courts. Law enforcement bodies and courts would consider the existing Civil Air Regulations a guide in determining if operation is reckless.

Supplement CAA Efforts—According to Mr. Wright, this type of state safety air regulation and enforcement would supplement CAA efforts in this field to the extent necessary to prevent an increase in the number of instances of reckless flying which otherwise would accompany the tremendous growth of private flying expected in the next few years. At the same time it was pointed out that this would be accomplished without necessitating the adoption of a large volume of conflicting regulations by the 48 states, thus avoiding the burden to aviation which the adoption of such regulations would create.

The CAA also hails the provisions of the proposed state statute as providing for the first time an efficient means of preventing the operation of aircraft in a manner annoying to persons on the ground, where such annoyance could be avoided.

State Pilot, Aircraft Registration—In addition to the provisions noted, the new model act contains provisions authorizing state registration of resident pilots and aircraft owned within the state, except pilots and aircraft employed in military or interstate commerce operations. Such registration would be solely for informational purposes. Pilots would be registered at an annual fee of one dollar and aircraft for a moderate fee in lieu of all state and local property taxes.

Also, the act would authorize two additional types of air safety regulation by the states which are not required by Federal Civil Air Regulations: (1) licensing of air schools; (2) licensing of instructors in aviation ground subjects.

Announcing the agreement on this model act, Mr. Wright emphasized that it is of importance to the future development of civil aviation, not only for the regulatory features but because it would provide the legislation necessary to permit a state to participate fully in the $500,000,000 federal-aid airport program which was inaugurated on May 13 when the President signed the Federal Airport Act.

Under the Act, the state agency could give financial or technical assistance by grant or loan in the construction, acquisition, improvement, planning or maintenance of airports and could act as a disbursing agent for federal funds made available for airport planning and construction.

One Set of Rules Desirable

State and Board officials have agreed that the use of the existing federal safety rules by the states in their campaign against reckless flying will promote uniformity of regulation throughout the country.

The Civil Air Regulations, already familiar to every licensed pilot, are written by the Civil Aeronautics Board. Until now the Civil Aeronautics Administration has been the sole enforcing agency.

The new policy of state participation in the enforcement of the federal rules has been approved in principle by the Civil Aeronautics Board. The Board has also approved in principle proposed methods for assistance in the investigation and reporting of accidents to private aircraft occurring within the state.

Indiana aviation officials, for example, propose that state motor police be dispatched to the scene of the accident, take over the policing details, and notify federal officials. In the event the federal government would not investigate the accident, the state would do the job.

To work out such details as these for state-federal coordination of reporting, investigation and enforcement, the Board has suggested that a standing committee be set up with its members including representatives of the Board, Civil Aeronautics Administration, National Association of State Aviation Officials and the Department of Justice.

Preil and Stockburger Named To New Civil Aeronautics Posts

Captain Alvin O. Preil, USNR, has been appointed Assistant Administrator for Business Management.

A. E. Stockburger, whose duties will be assumed by Captain Preil, has been appointed as special advisor to the Administrator. He will be the CAA's principal representative on the staff of the United States delegates to PICAO to deal with matters pertaining to business organization and preparation of budgets. Mr. Stockburger also will devote himself to policy matters involving coordination between several CAA services. His work will replace that of the executive coordinating committee, and he will head any such policy coordinating committees appointed in the future.

Both Preil and Stockburger have been with the CAA for many years, Preil for the full span of the organization's existence. He started as Airways Extension Superintendent, with the Aeronautics Branch of the Department of Commerce just after its formation in 1927, and later became manager of the CAA's Sixth Region then at Oakland, Calif. In turn he served in the personnel department, later as chief of the Signals Division, and in various Administration capacities. As a Naval reservist for 27 years, he spent a total of 11 years on active Navy duty, with a tour of more than four years in World War II. He served aboard a carrier in the Pacific, and on shore in various personnel and administrative capacities, receiving for his outstanding work the Legion of Merit.

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CAA JOURNAL

Henry A. Wallace
Secretary of Commerce

Civil Aeronautics Administration
T. P. Wright, Administrator

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PREPARED BY AVIATION INFORMATION

CAA Answers

Q—A certain light plane has the following specifications: Gross weight (landplane) 1250 pounds; gross weight (seaplane) 1350 pounds; useful load 525. Why isn't the useful load for the landplane 100 pounds greater than for the seaplane? Empty weight of the landplane is 725 pounds; for the seaplane, 825 pounds. Why is the landplane overloaded say at 1300 pounds and the seaplane at 1350 pounds not overloaded? R. M.

A—The seaplane is permitted a higher gross weight than the landplane because the airworthiness requirements of the Civil Air Regulations allow a five percent reduction in maneuvering load factor for seaplanes. This results in the useful load for landplanes and seaplanes being approximately the same.

Q—What is the record flight time from Hawaii to California? H. R.

A—Latest flight time record was set May 12 by an Army plane, a B-29, which flew from John Rodgers Field, Honolulu, to Hamilton Field, California, in 7 hours 14½ minutes. Arrival time was figured when the plane was directly over the control tower. Best previous time was 7 hours 54 minutes set by a Pan American Airways Clipper the preceding week, computed "from wheels-off to wheels-down."

Percy to Act as Coordinator Of CAA-PICAO Activities

Coordination of Civil Aeronautics Administration activities relating to the Provisional International Civil Aviation Organization will be handled by Walker Percy who has been appointed by Administrator T. B. Wright as CAA-PICAO Coordinator.

Mr. Percy will serve on the Plans and Performance staff directed by Alfred Hand, bringing to his new duties the benefit of experience gained since October 1945 as War Department liaison officer with PICAO. He acted as advisor to Gerald B. Brophy and Paul A. Smith, the U. S. representatives to the PICAO council and air navigation committee respectively. At the Dublin regional conference of PICAO, he was technical secretary to the U. S. delegation.

Mr. Percy was with the Army Air Forces from July 1942 until this month, serving as a major with the Operations Division, Assistant Chief of Air Staff (3).

Mr. Percy takes over the duties formerly assigned to Glen Gilbert, who is now chief of the U. S. Technical mission at PICAO regional conferences.

Seven U. S. Carriers Get Certificates For Air Service to Latin America

Seven domestic airlines have been authorized to provide additional service to Mexico, the Caribbean area, and Central and South America by the decision of the Civil Aeronautics Board in the Latin American case.

American Airlines, Braniff Airways, Chicago and Southern Air Lines, Colonial Airlines, National Airlines, Western Air Lines and Eastern Air Lines were given permanent certificates for Latin American service which will provide competitive service over routes now operated by Pan American and its affiliate Pan American-Grace Airways (Panagra).

New Gateways—Only U. S. gateways to Latin America now designated by permanent certificates are Miami and Brownsville. Additional gateways on the new route system will be New York, New Orleans, Houston, Tampa, Fort Worth-Dallas, El Paso, and Los Angeles, providing direct or connecting service for southbound traffic from all sections of the United States.

Presidential Specifications—The decision issued by the Board includes changes made by the President of the United States, after the opinion and orders were submitted to him as provided by the Civil Aeronautics Act. The President, acting in accordance with his authority under the Act, and upon certain factors relating to the broad national welfare and other matters for which the Chief Executive has a special responsibility, made the following changes in the Board's conclusions: (1) the extension of an additional carrier to South America as far south as Rio de Janeiro and Buenos Aires; (2) the certification of Eastern Air Lines, Inc., for a nonstop service from Miami to San Juan; (3) the certification of a second carrier between New York and Bermuda; (4) the certification of Western Air Lines, instead of Pan American Airways, for the Los Angeles-Mexico City route with stops at San Diego and La Paz, Mexico.

New Caribbean Service—Competitive service in the Caribbean area will be provided by Chicago and Southern over a comprehensive route system extending from Houston and New Orleans to Havana (Cuba) and from Havana on one branch to Camaguey (Cuba), Port-au-Prince (Haiti), Cuidad Trujillo (Dominican Republic) and San Juan (Puerto Rico); on the second, to Kingston, Aruba, Curacao (Netherlands West Indies), and Caracas (Venezuela).

The Caribbean area, embracing the West Indies, Venezuela and Colombia on the north coast of South America, and the countries of Central America including the Canal Zone, is described by the Board as affording the most promising field in the proceeding for early expansion of air transportation. This area gets 38 percent of the total international travel between the United States and Latin America, the opinion stated.

Chicago and Southern's U. S. system extends from Chicago and Detroit on the north through important industrial cities of the Mississippi Valley to its southern terminals, New Orleans and Houston. The carrier will be able to furnish single-carrier service connecting the Caribbean area with important cities of the Mississippi Valley and the Great Lakes region, the Board said.

In this area, Pan American was issued a permanent certificate for service from New Orleans and Houston to Guatemala City via Merida (Mexico).

Pan American Selected—New York-San Juan service sought by six applicants, three of them steamship companies, was granted to Pan American. This route, the Board found, fits most logically the Pan American system and will permit this carrier to provide single-company service for heavy traffic moving between New York and Rio de Janeiro and points south as far as Buenos Aires.

The third new route to San Juan was granted Eastern from the U. S. terminal, Miami.

National's route will extend from Tampa and Miami to Havana, the Cuban city which the Board describes as an important point for U. S. traffic. Before the war U. S. traffic was four times greater to Havana than to any other Latin American city.

New service to Bermuda, recreation spot, will be provided by Colonial Airlines with U. S. terminals at Washington, D. C., and New York. Pan American now operates local service between New York and Bermuda.

South American Service—Braniff was selected as the "additional carrier" to provide extensive trunkline service to South America on a route from Houston to Rio de Janeiro and Buenos Aires. Intermediate points are Havana, Balboa (Canal Zone), Bogota (Colombia), Quito and Guayaquil (Ecuador), Lima (Peru), La Paz (Bolivia), and Ascuncion (Paraguay).

This route, the Board said, would result in a sound system of air transportation providing competitive service with Panagra to major traffic points on the west coast of South America, and will provide single-carrier service for traffic from the area west of the Mississippi, now served by Braniff Airways.

Five Routes to Mexico City—Four carriers have been given new routes to Mexico City in addition to the route now operated by Pan American between Brownsville and Mexico City via Tampico. Pan American's Brownsville terminal has also been extended to Houston, giving the carrier a large city with traffic generating capacity for its terminal. Brownsville, the Board said, has been an international gateway only because of its border location rather than its commercial importance.

American will continue on a permanent basis its temporary wartime service from El Paso and Fort Worth-Dallas to Mexico City through Monterrey. The airline has a permit from the Mexican government for this service and owns and maintains all the ground and operating facilities in Mexico it uses on the route.

Braniff's route from Laredo on the Texas border is extended to Mexico City through Monterrey forming an outlet for Mexican-bound traffic from the Midwest. The carrier now connects at Nuevo Laredo with the Mexican line, Aerovias Braniff, and also with Pan American at Brownsville for service to Mexico City. San Antonio is a co-terminal.

Eastern's route from New Orleans to Mexico City is designed to serve the needs of the Eastern Seaboard.

Decides on Air Carrier—In selecting a carrier to operate the New York-San Juan route for which there were both steamship and air carrier applicants, the Board compared the respective advantages of the individual applicants and in designating an air

(See South American Routes, page 74)

CAA's Blind Landing System Put into Use; GCA Work Continues

Instrument landing systems are now being installed by the Civil Aeronautics Administration at 81 airports throughout the country, 31 of them for the Army. In the next fiscal year an additional 31 systems will be installed for civil use.

These are the familiar three-element systems developed by the CAA before the war and adopted as standard by the Army which gave them the military designation of SCS–51.

Working on GCA System—While this system is being installed for early use, the CAA continues development work both on its own system and the radar "ground controlled approach" system, also used by the Army and Navy during the war. Of the two systems, the CAA's system warrants national installation, and the GCA still requires further consideration and development.

The CAA system consists of a localizer, glide path and marker beacons. First work was done on it at the Bureau of Standards. Since then, thousands of completely blind landings have been made on this system by hundreds of different pilots. At historic College Park Airport near Washington, hundreds of landings have been made with the wheels of the plane touching each time within a space 100 feet square, with the pilot landing "under the hood" by instrument alone.

Further Development—Further development of this system is planned at Indianapolis to produce completely automatic landings of airlines in bad weather. To do this, the automatic pilot, with which many transport airplanes are equipped, is connected to the instrument which receives the signals of the transmitters on the ground, and planes have been brought safely down to 10 or 25 feet above the runway time and time again.

The three elements give the pilot indications in the cockpit and he flies the airplane by observing a cross-pointer instrument. The localizer is a wedge-shaped signal sent out about 15 miles from the airport. The pilot flies down the center of this wedge and any variation to either side is indicated on the vertical needle of the cross-pointer.

One other bit of information is given him by marker beacons, placed at intervals along the approach path. These are fan-shaped radio signals sent up at right angles to his path, through which he flies. As he passes through a marker beacon signal, it lights a bulb on his instrument panel. These bulbs are of different color and they inform him that he is five or three miles from the end of the runway, or right over the end of the runway.

The glide path is a sloping signal which the pilot encounters three miles from the airport and which leads him down to the surface at an angle of about three degrees. If he gets above or below this path, the horizontal needle on the instrument warns him. Thus, when he flies the plane so that the vertical and horizontal needles cross at right angles in the center of the instrument, he knows he is on the right course toward the centerline of the runway and on the right path coming down to the surface. The glide path was a parabolic curve which gave the airplane the proper flare as it neared the surface.

Straight Path Approved—There were differences of opinion as to the merits of a curved glide path versus a straight path. The first straight path to be made practical was produced by Don Stuart, now Director, Technical Development Service, W. E. Jackson, now Chief, Radio Division of that Service, and Henry I. Metz, now Chief of the Experimental Station. With this path, plus the localizer, a relatively easy problem, and the marker beacons, also easy to produce, the engineers had something to offer the airline pilots which they could use and of which they approved. All these signals are transmitted on very high frequencies.

Thus all indications for landing are in the cockpit and the pilot is in complete charge of his plane. In actual practice, a pilot would have his co-pilot fly in by instruments, while he watched for the first good view of the ground, at which time, he would signal the co-pilot, take over the controls and make the actual contact with the ground visually. It is rare that the weather is so bad that the ground cannot be seen from 25 to 50 feet.

GCA Radar System—The radar system, GCA, consists of radar screens on the ground on which the plane is visible as a dot of light. One of the operators on the ground, through VHF radio, "talks" the pilot through his landing. Lines on the screen enable him to direct the pilot to the right or left or up or down, and thus keep him on a safe path of approach to his landing. No receiving equipment for the radar system is required in the plane, but good ground to air communication with the plane is essential.

At Indianapolis two radar developments are progressing side by side. The Army, using a C-54 four-engined plane and a multitude of different pilots, is making comparative tests of the CAA system and GCA. The CAA, using GCA equipment given it by the Army and Navy, is making tests, using airplanes of several kinds and sizes.

(See page 78)

First CAA Radar-equipped Control Tower Unveiled for Aviation Writers at Indianapolis

The first radar-equipped control tower for civilian flying was unveiled at the Indianapolis Airport, May 24, by the Civil Aeronautics Administration.

Built by the CAA Technical Development Service on the roof of its Experimental Station, the tower was given its initial demonstration before members of the Aviation Writers Association, holding their annual convention at Indianapolis.

The tower employs a console screen, constructed by the CAA after many experiments with military versions of radar equipment, to give the controller a "plan-picture" of all aircraft within 30 miles of the airport.

The picture appears on a cathode ray tube screen, 12 inches in diameter, and from it the regular control tower operator can schedule safely and speedily departure and approach of aircraft without being hampered by poor visibility.

The radar screen and other tower improvements will be service-tested for several months in the handling of traffic at the Indianapolis airport, and on the basis of this experience, the CAA will be in a position to determine what plans for installation at key airports throughout the country should be undertaken.

In its present stage, the screen gives distance and direction information on all planes in a 30-mile radius, and has no "blind spots." Development of equipment for determining altitude and identity of the aircraft will be carried out by CAA.

The basic radar equipment which supplies signals to the tower screen is known as the Navy "SG." It was built by the Raytheon Company and modified at Indianapolis under direction of Raytheon engineers to include many late improvements developed for the Navy. Among these are the "moving target indication," which allows only moving aircraft to appear on the screen, eliminating disturbing "ground clutter" from reflection of waves by nearby objects. Another change is installation of an improved search antenna, which rotates on top of a 65-foot steel tower. This permits the CAA operator to "see" airplanes at high elevation above the station as well as those at horizontal distances.

The console has been built by CAA so that the screen can be connected to any one of several kinds of search radar equipment. Normally, of course, only one would be provided, but in this experimental tower, actual operating data must be obtained on all types.

In addition to the expected increase of speed and safety for airport traffic, the tower radar has the advantage of requiring no new equipment in the airplane itself.

Inspecting the new radar console screen now in operation in the Indianapolis Municipal Airport control tower are (left to right) Arthur A. Riley, aviation editor of the Boston Globe; A. W. Randall, CAA radar engineer, and Maurice Roddy, aviation editor of the Chicago Times and retiring president of the Aviation Writers Association.

CAB Safety Rules For Nonscheduled Carriers

(Continued from page 69)

uled carriers, divided among at least 100 times as many companies.

529 Airline Craft—By actual count, nonscheduled carriers are using 101 Lockheed Lodestars, 13 Curtiss Commandos, 339 Douglas DC-3's and 76 DC-4's, or a total of 529 airline type aircraft. In addition, at least 2,000 smaller twin-engine transports, such as Beechcrafts and Cessnas, plus a minimum of 3,000 single-engine transports are being used by operators who will require a certificate under the new Part 42 of the Civil Air Regulations.

The CAA as yet has not assembled a complete list of nonscheduled operators, nor determined exactly how many come under Part 42, but a telegraphic survery of its regional offices reveals that there are more than 4,630 companies known to be conducting miscellaneous commercial flying operations. More than half of these are engaged in activities that appear to be covered by Part 42.

In the city of Miami alone, 36 nonscheduled operators have bases, while 40 others make charter flights into the city from other bases.

Do Many Jobs—Among the great variety of activities carried on by commercial operators in addition to transportation of passengers and cargo were the following services reported by CAA regional offices:

Delivering mail for the Indian Service; dropping food during high snow; patrolling fences; mineral prospecting; hunting lost persons; heading wild game; determining amount of snow; ambulance service; eagle hunting; air police; radio and television transmission and advertising via public address systems.

Some of these unusual services were by no means confined to a few isolated instances. Ambulance services were reported by six of the seven CAA regions in continental United States, with a total of 88 such operations. Coyotes were hunted by 155 different operators. Searches for lost persons were conducted by 121 operators.

Only passenger and cargo services, however, are likely to come within the purview of CAA under Part 42. CAA is now drawing up requirements for operating certificates under terms of the Board regulation. Others will be subject only to existing general standards for airworthiness of aircraft and competency of pilots.

In addition to the instruments and equipment required by the general operations rules under which nonscheduled carriers now operate, the new Part 42 specifies extra equipment for safety.

Pilot Qualifications—The first pilot must have a commercial pilot certificate with the proper aircraft type and class rating. For night contact flight, and day or night instrument flight he must have an instrument rating. Minimum flight time required for day flight CFR is 50 hours cross-country as pilot or co-pilot; day flight IFR—500 hours as pilot or copilot including 100 hours cross-country flight; night flight CFR or IFR—500 hours as pilot or co-pilot including 100 hours cross-country with 25 hours of this at night.

A second pilot, if the aircraft requires more than one, must have a commercial rating for CFR flights and, in addition, an instrument rating for IFR flights.

Flight Time Limitations—These specify that a pilot may not fly more than ten hours in any 24 consecutive hours without an intervening period of at least eight hours during which he is relieved of all duty with the carrier.

Recent Flight Experience—No pilot can serve as first pilot unless, within the preceding 90 days he has made at least five take-offs and landings to a full stop in the same type and class of aircraft, with two of these in the same make and model. To serve at night, the take-offs and landings must be made during hours of darkness.

Under instrument flight rules, the first pilot, within the preceding six months, must have had at least six hours of instrument flight time, with two of these acquired in actual flight in the overcast while on an instrument flight plan filed with a control center.

Logging Flight Time—A first pilot may log the total flight time during his command of the aircraft, and the second pilot may log either 50 percent of the total flight time or all the flight time during which he is the sole manipulator of the controls. Instrument flight time may be logged as such by the pilot actually manipulating the controls only when the aircraft is flown solely by reference to instruments either under actual or properly simulated instrument conditions.

Fuel Supply—Aircraft flying CFR must carry sufficient fuel and oil to fly to the next point of intended landing and 30 minutes thereafter at normal cruising consumption. Aircraft flying IFR must have enough fuel to complete the flight to the first intended landing, be able to fly on to the alternate airport and continue flying for 45 minutes thereafter.

Weather Minimums—Higher weather minimums are prescribed for alternate airports on instrument flights than those for scheduled air carriers.

THE WHITE HOUSE
WASHINGTON

May 9, 1946

Dear Dr. Wright:

It gives me great pleasure to congratulate you, and through you the personnel of the Civil Aeronautics Administration, on the twentieth anniversary of federal regulation and fostering of civil aviation.

The two decades since the signing of the Air Commerce Act on May 20, 1926 have seen a tremendous growth in our civil aviation. Much of the credit for this growth should go to the skilled and faithful employees of the Civil Aeronautics Administration. Their efforts have built a 40,000-mile network of airways which proved invaluable to our armed forces during the war, and now provide the groundwork for greater expansion of civil flying.

Their contribution in the field of air safety has been equally important and I look to the CAA to continue its watchfulness in order that flying may become as commonplace as motoring.

As the CAA enters its third decade, it is faced by even more challenging responsibilities, and I know that you will meet them in the same spirit of forward-looking public service and with the same special skill which has characterized all the activities of the Civil Aeronautics Administration.

Very sincerely yours,

Harry S. Truman

Dr. Theodore P. Wright,
Administrator of Civil Aeronautics,
Department of Commerce,
Washington, D. C.

Advises Denial of American Acquisition of Mid-Continent

A report by Examiners Cusick and Cox recommends that the Board deny American Airlines' application to acquire control of, or merge with, Mid-Continent Airlines. The report stated that approval of this application would result in the Board sanctioning the payment of an excessive price for Mid-Continent's certificates. The system of Mid-Continent joined to that of American would not form an integrated pattern of service. The diversion from other carriers would have an unhealthy and detrimental effect on their operations; and the enlargement of American's competitive position in the industry would unbalance the domestic air transportation pattern.

Mid-Continent is a north-south carrier, with its system extending from New Orleans on the Gulf of Mexico to Minot, N. D., about 100 miles from the Canadian border.

American is predominantly an east-west long-haul operator, conducting service over the southern transcontinental route. It touches Mid-Continent's system at only four points, Joplin, Texarkana, St. Louis, and Tulsa.

Board Grants First Pickup-Passenger Service to New West Coast Carriers

In its decision in the West Coast air service case the Civil Aeronautics Board authorized the transportation of persons, property and mail by three new local or feeder airlines to provide improved local air service in California, Oregon, Washington, and Idaho, and amended the certificates of three existing air carriers operating in the same area.

The Board granted temporary three-year certificates of public convenience and necessity to Southwest Airways Company, of Beverly Hills, Calif.; West Coast Airlines, Inc., of Seattle, Wash., and Empire Air Lines, Inc., of Lewiston, Idaho, and amended the existing certificates of American Airlines, Western Air Lines, and United Air Lines, to permit additional air service in the same area.

Combined Pickup-Passenger Service—Southwest Airways and West Coast Airlines sought certificates authorizing air transportation of persons, property and mail and proposed to provide this service with planes equipped to provide both passenger and pickup services. Although there is at the present time no plane certificated for this type of operation—combining a passenger service with a pickup operation in the same plane—the success of the pickup plane has been fully demonstrated both in commercial operations by All American Aviation, and during the war by the military services. Much has been done also toward the development of facilities for the combined services. The Board stated that the nature of service to be provided in this area, the probability that airports may be unavailable at some of the communities requiring service, and the limited traffic potential at the smaller communities to be served, will justify starting service of this character as soon as it can be conducted safely.

Awaits Plane Approval—Certificates issued the local or feeder carriers contain no limitation with respect to the type of equipment to be used. It will, therefore, be possible for these carriers to put into operation a combination pickup-passenger plane when such a plane is certificated. The Board hopes that the fullest experimentation with this type of operation will be carried on in this area.

Southwest Airways Route—The Board authorized Southwest Airways to carry persons, property and mail between Los Angeles and San Francisco via Oxnard-Ventura, Santa Barbara, Santa Maria, San Luis Obispo, Coalinga, Monterey, Santa Cruz, and San Jose, Calif.; between San Francisco and Medford, Oreg., via Vallejo, Sacramento, Marysville, Chico, Red Bluff, Redding, Dunsmuir, and Yreka, Calif:; and between San Francisco and Medford, Oreg., via Santa Rosa, Ukiah, Fort Bragg and Eureka, Calif.

West Coast Airlines Route—West Coast Airlines, was authorized by the Board to transport persons, property and mail between Medford and Portland Oreg., via Grants Pass, Roseburg, North Bend-Marshfield, Eugene, Albany-Corvallis and McMinnville, Oreg.: between Portland, Oreg., and Seattle, Wash., via Kelso, Chehalis, Olympia and Tacoma, Wash.; between Portland, Oreg., and Seattle, Wash., via Kelso, Wash., Astoria, Oreg., Aberdeen-Hoquiam, Olympia and Tacoma, Wash.; between Seattle and Port Angeles, Wash., via Port Townsend, Wash.; and between Seattle and Bellingham, Wash., via Everett, Mt. Vernon and Anacortes, Wash.

Empire Air Lines Route—Authorization to transport persons, property and mail was granted by the Board to Empire Air Lines, between Idaho Falls and Boise, Idaho, via Pocatello, Burley, Twin Falls and Gooding, Idaho; between Boise, Idaho, and Spokane, Wash., via Ontario, Baker, La Grande and Pendleton, Oreg., Walla Walla, Wash., Lewiston-Clarkston, Pullman-Moscow and Coeur d'Alene, Idaho.

Route Amendments—In amending the certificate of American Airlines, the Board removed the restriction prohibiting transportation of local passengers between San Diego and Los Angeles and further provided that San Diego shall be served only on flights originating or terminating east of El Paso, Tex.

The certificate of United Air Lines, for route No. 1 was amended to include The Dalles, Oreg., and Twin Falls, Idaho, as intermediate points, to permit direct service between Pendleton, Oreg., and Seattle, Wash., and to permit direct service between Boise, Idaho, and Reno, Nev. On United Air Lines route No. 11 the Board amended the certificate to include Salinas and Eureka, Calif., and Klamath Falls and Bend, Oreg., as intermediate points, and Long Beach, Calif., as a co-terminal point with Los Angeles, subject to the proviso that Klamath Falls shall not be served on the same flights with Medford and that Bend shall not be served on the same flights as Eugene.

The Board amended the certificate of public convenience and necessity of Western Air Lines, for route No. 63 to include Oakland, Calif., as a co-terminal with San Francisco, Calif.

Member Lee Dissents—Member Josh Lee, in a concurring and dissenting opinion stated that "the selection of Western to operate between San Francisco and Portland and Seattle would strengthen substantially the network of air services in the West." He said that such a logical extension of its route system was necessary in order for Western to achieve its intended purpose as a strong, independent competing West Coast carrier.

Mr. Lee further dissented on the terminal cities provided for Empire and West Coast by the majority decision. He said that in order for a route to be economically sound it should have a good size city for each terminal. He recommended that Empire be permitted to extend its services to Salt Lake City, Seattle, Tacoma, and Portland, in addition to Spokane, thereby terminating each of its routes in a large center of population. He also recommended that West Coast should terminate at San Francisco instead of Medford.

Mr. Lee also dissented from the majority's denial of the application of Nevada Pacific Air Lines. He said that service to the area lying between the Sierra-Nevada mountains and the Salt Lake basin should be granted because of the isolation of the points involved.

He also dissented from the majority decision to grant trunk-line service to Eureka, Twin Falls, and The Dalles by United Airlines at this time, pointing out that the traffic from these cities is required in order to support the feeder line services granted in the respective areas.

Considers Airport Act Amendment

An amendment to the Federal Airport Act to allow CAA to submit its list of class 4 and larger projects to Congress for approval anytime during fiscal 1947 has been introduced before the Senate by Senator McCarran and before the House by Representative Bulwinkle. The original bill required submission of this list two months before July 1. However, the bill was not signed by the President until May 13, making it too late for the CAA to meet the fiscal 1947 deadline date set by the Act for presenting a list of proposed improvement and construction projects for large airports.

T. E. Braniff May Control Mexican Line The Board Decides

The Civil Aeronautics Board has denied the application of Braniff Airways, for approval of that company's proposed acquisition of the control of Aerovias Braniff, S. A., a Mexican air carrier corporation organized by T. E. Braniff, President of Braniff Airways, a United States domestic air carrier.

The Board pointed out that upon the present record, it "must recognize the possibility that Aerovias may become a drain on the resources of the domestic carrier, a result which might impair that carrier's ability again to raise needed capital, or might make it unable adequately to respond to the evolutionary requirements of air transportation without increased or prolonged assistance by way of public subsidy. The grave possibility of this result, obviously inconsistent with the public interest, requires our disapproval of the proposed acquisition by Braniff."

Granted Alternate Application—In the same order the Board granted the alternate application of T. E. Braniff for approval of his control of Aerovias Braniff, subject to the condition that such approval would be effective only as long as Braniff Airways shall refrain from entering into any contract or lease with or for the direct or indirect benefit of Aerovias Braniff without first obtaining the Board's approval.

With reference to Mr. Braniff's acquisition of control over Aerovias Braniff, S. A., the Board said: "While the proposed acquisition by Mr. Braniff is consistent with the public interest, the existence of the latter's control over Braniff Airways could conceivably lead to a use of that carrier's economic resources for the support of Aerovias. Such support might be forthcoming by the purchase of nonvoting stock, by a direct loan of funds, or by the indirect lending of credit, as by guaranty of a note or open account."

Braniff Airways, Inc., originally sought the Board's approval of its acquisition of control over Aerovias Braniff, S. A., on April 5, 1944, and on April 25, 1944, T. E. Braniff filed an application seeking approval of his personal acquisition of control over Aerovias.

South American Routes

(Continued from page 71)

carrier for the service, concluded that the air carrier applicant had the most to offer in fulfilling the promotional and competitive objectives of the Civil Aeronautics Act. The Board thought that the air carrier applicant, being dedicated solely to the advancement of air transportation, would be able to develop air travel more than the steamship company whose promotional energies would be divided between air and ocean travel.

The Board likewise concluded that an independent air carrier would be able to provide more vigorous competition than would a steamship carrier, saying, "It would be expecting too much to assume that a transportation company engaged in both air and sea transportation would be in a position to provide vigorous competition between its air transportation and its surface transportation on this route." The Board thought that in any conflict of interest between the two transportation arms, the issue would not be resolved in favor of the air arm with its relatively small investment, and that the larger investment might be expected to dominate in any such conflict between the two.

Board Removes Last Wartime Restrictions On Airline Route Stops

The Civil Aeronautics Board has issued orders to seven air carriers withdrawing the last of the suspensions of service authorized during the war due to the shortage of aircraft available for commercial operations or other military cause. The carriers and the 18 cities involved are as follows:

American Airlines: Niagara Falls, N. Y., Wilkes-Barre, Pa.; Braniff Airways: Ponca City, Okla.; Colonial Airlines: Glen Falls, N. Y.; Mid-Continent Airlines: Aberdeen, S. D.; Bismarck-Mandan and Minot, N. D., St. Joseph, Mo.; Northeast Airlines: Caribou, Lewiston-Auburn, Millinocket, and Waterville, Maine; Transcontinental & Western Air: Phoenix, Ariz., to Las Vegas, Nev., via Prescott, Kingman and Boulder City; Western Air Lines: West Yellowstone, Mont.

New Service Can Begin—Additional orders were issued removing the last of the restrictions on the inauguration of service to newly certificated cities imposed for reasons of national defense. Four carriers and eight cities were involved in these orders, as follows:

Continental: Bartlesville, Okla.; Eastern: Atlantic City, N. J.; Northwest: Green Bay, Wasau, and Eau Claire, Wis.; TWA: Columbia, Mo., Grand Canyon, Ariz., Lancaster, Pa.

Must Submit Plans—In letters to 16 domestic air carriers, the Board called the attention of the carriers involved to the foregoing actions and asked them to submit their plans for the inauguration of service to the cities affected, and to the following 39 additional cities which are not receiving air service as authorized by certificates of public convenience and necessity issued to the carriers shown:

American: Ann Arbor, Jackson, and Kalamazoo, Mich., Binghamton, Elmira-Corning, and Utica, N. Y., Charleston, Huntington, and Parkersburg, W. Va., New Haven, Conn., Scranton, Pa., Springfield, Ill.; Braniff: Muskogee, Okla.; Colonial: Binghamton, N. Y., Scranton-Wilkes Barre, Pa.; Chicago & Southern: Anderson-Muncie-New Castle and Marion, Ind., Bloomington and Springfield, Ill., Pine Bluff, Ark.; Continental: Salina, Kans., Trinidad, Colo.; Delta Air Lines: Anderson-Muncie, Ind., Lexington, Ky.; Eastern: Charleston, W. Va., Florence-Sheffield-Tuscumbia, Ala., Lexington-Frankfurt, Ky.; Inland: Hot Springs and Spearfish, S. D.; Mid-Continent: Ottumwa, Iowa, Quincy, Ill.

National: Gulfport, Miss., Savannah, Ga.; Northeast: Manchester, N. H., Provincetown, Mass., Waterbury, Conn., White River Junction, Vt.; Northwest: Jamestown, N. D.; Pennsylvania-Central: Charleston and Wheeling, W. Va., Sault Ste. Marie, Mich.; TWA: Binghamton, N. Y., Wheeling, W. Va.; United: Merced and Modesto, Calif., Tacoma, Wash.; Western: San Bernardino, Calif.

May Take New Action—In taking these actions with respect to the 65 cities certificated but not receiving air service the Board wrote to the carriers that it believes "it is of primary importance that all certificated points receive service at the earliest possible moment in accordance with the terms of the certificate of public convenience and necessity authorizing the service." In some cases, the Board wrote, "if there is no reasonable likelihood of service being provided within the near future, either through necessary improvements of the airports or with the use of flight equipment which is suitable for the present airports, the Board may wish to give further consideration to what action may be required in the public interest to provide air transportation to such communities."

The Board also informed those carriers holding temporary certificate amendments or exemption orders establishing certain services for national defense considerations that the Secretaries of War and the Navy, as might be appropriate, are being asked whether national defense requirements necessitate further continuation of these authorizations and that these matters will be given further consideration upon receipt of replies from those Departments.

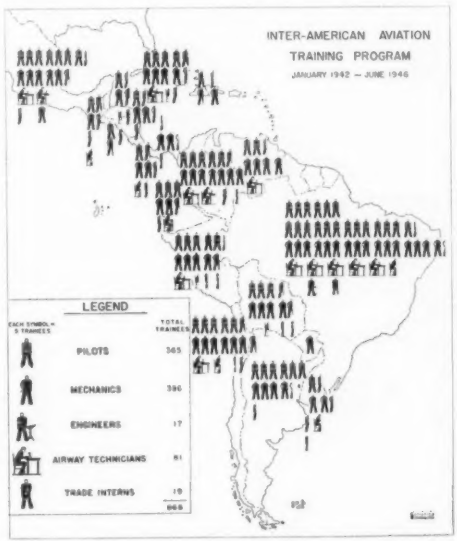
Fifth Training Program Begins This Month

The fifth Inter-American training program of the Civil Aeronautics Administration commences this month with airway technician and aviation industry training the only types of instruction scheduled. Eighteen trainees from South and Central American countries will take air traffic control and communications courses at the CAA training center in Kansas City, Mo., and nine will be given on-the-job training with various U. S. airlines and aircraft and engine manufacturers.

Pilot courses were wound up this Spring with 22 graduates completing a year's course at Purdue Aeronautics Corporation, W. Lafayette, Ind., which qualified them for commercial pilot certificates with instrument and flight instructor ratings. In the four programs a total of 365 students have received U. S. pilot training.

Forty mechanics in the fourth program completed their class work at Spartan School of Aeronautics, Tulsa, Oklahoma, March 22. However, 30 of these are remaining for six months on-the-job training with eight airlines, four aircraft manufacturers and one aircraft engine manufacturer.

Two other groups already have been given airway technician courses—45 in the third program, and the 36 in the fourth program. The latter group completed their work March 15 and have returned to their countries.



In the four programs since January 1942 the Civil Aeronautics Administration has supervised the training of 868 pilots, mechanics, airway technicians, administrative engineers and trade interns—citizens from all of the 20 American nations.

The fifth program, which is being financed by the State Department as part of the program of cooperation with American republics, will be under the supervision of the Civil Aeronautics Administration as the preceding programs have been. Students are chosen by local committees through selection standards set up by the CAA.

PICAO Assembly Meets in Montreal For First Session

First meeting of the Interim Assembly, primary policy making body of the Provisional International Aviation Organization, with delegates from over 40 countries, convened at Montreal, May 21 and will continue in session four to five weeks.

The assembly, established by the interim agreement concluded at the International Civil Aviation Conference at Chicago in 1944, will receive and review reports on international air navigation and air transport which the interim council has been working on continuously since August 1945. It will also approve the annual budget, discuss various proposals regarding air transport systems and agreements relating to private air law, and consider a permanent location for the organization.

Air Navigation Reports—The council's air navigation committee, on which CAA officials have been particularly active, has developed the procedures, standards and practices for international rules of air and air traffic control, aerodromes, air routes and ground aids, telecommunications and radio aids to air navigation, meteorology, aeronautical maps and charts, search and rescue, personnel licensing, accident investigation, operating practices, and aircraft airworthiness. These will be presented to the assembly for its information. Each country under terms of the interim agreement will apply the PICAO recommendations to their national air navigation practices as rapidly as possible.

The present council, primary executive body of PICAO, with representatives from 21 countries, was elected by the Chicago conference. Hereafter council members will be elected by the assembly.

The assembly is made up of representatives appointed by each of the member countries. Each country is allowed five delegates and five alternates.

Burden Heads U. S. Group—Chairman of the United States delegation is Wm. A. M. Burden, Assistant Secretary of Commerce. Vice Chairman is L. Welch Pogue, Chairman of the Civil Aeronautics Board. Gerald B. Brophy is U. S. representative on the interim council. The other delegates are Garrison Norton, Deputy Director of the Office of Transport and Communications Policy, State Department, and Harllee Branch, Member of the Civil Aeronautics Board.

Alternates are C. I. Stanton, Deputy Administrator for Civil Aeronautics; Paul T. David, Assistant Chief of the Fiscal Division, Budget Bureau; Stokeley Morgan, Chief of Aviation Division, State Department; George C. Neal, General Counsel of the Civil Aeronautics Board, and the U. S. representative on the air navigation committee, Paul A. Smith, Assistant to the Director, Coast & Geodetic Survey.

Special consultants are John L. Sullivan, Assistant Secretary of Navy for Air, and W. Stuart Symington, Assistant Secretary of War for Air. Alfred Hand, Chief of the CAA Plans and Performance Staff, is technical secretary of the delegation.

1945 Operating Expenses Up

The domestic air carrier books for 1945 show a total operating revenue of $214,371,966, an increase of $53,467,400 over 1944 in passenger, mail, express and freight and other revenue items. However, operating expenses also rose, bringing a $2,426,590 decrease in the net revenue for 1945 compared with the preceding year.

A bill (H. R. 5560) to reduce the postage rate on first class domestic air mail from 8 cents to 5 cents an ounce was passed by the House.

CAA Activities Cost 17 Cents a Person

(Continued from page 69)

times the 1926 total, and today's figure easily should be tripled in ten years.

"But in addition, we can look to aviation to make new jobs by facilitating the industrialization of the West and South; by making possible increased foreign trade with existing markets and new, undeveloped areas; and by stimulating greater travel by Americans both at home and abroad just as the automobile did.

"For the next few years we must be prepared to invest substantial sums in order to make up for the enforced lag in civil aviation facilities during the last five wartime years. Our airways and our airports must be modernized and expanded without further delay if we do not want them to become bottlenecks blocking civil aviation development.

"All this means a rise in government's annual expenditures on civil aviation but the proportionate increase will be far less than the rise in the volume of civil flying. Our ground facilities will be used more intensively as this volume increases and the cost to government per unit of flying will decrease. We saw the same process in automotive transport after the last world war, when the use of automobiles began for the first time to approach the capacity of the highway system. Under such conditions the direct return to your government in the form of taxes on aviation enterprises, on the sale of aviation gasoline and from other aviation sources, will rise very rapidly in the next few years—to say nothing of the tremendous contribution of a large and healthy civil aviation to the efficiency of our national economy. There is little doubt that before many years civil aviation will be returning far more to government than the government outlay upon it.

Prudent Investment—"For these reasons I am confident that the benefits to be derived from government-financed aviation facilities and services will prove that the investment in them which is absolutely *necessary* if aviation is to attain its normal growth is also a *prudent* investment from the standpoint of our national interest. To you, the American people, who are the owners of this great civil aviation network, let me report on how your public servants are operating it, and what it is costing you, so you can judge for yourself whether we are exercising our stewardship soundly.

"The biggest activity of the Civil Aeronautics Administration is the establishment and operation of the Federal Airways. The Federal Airways are the lighted, radio-equipped routes which cover the United States, making possible safe aerial navigation in good weather and bad. From the days when pioneer airmen carried the mail across the continent with only bonfires to light the way, CAA technicians have developed a 40,000-mile system that has become a model for the rest of the world.

"When clouds obscure the ground, the pilot follows the radio beams sent out by the CAA range stations. He keeps in touch with the CAA communications stations along his route, which relay information about his flight to an air traffic control center. This center makes certain that the pilot is following a course safely separated from that of all other planes in the area, just as stop and go lights and policemen on the ground help to prevent collisions among automobiles. When the pilot nears his destination, CAA personnel in the airport control tower take over guidance of his flight until a safe landing is completed.

Must Be Modernized—"Effective as these methods have been in the past, many improvements are necessary for today's growing traffic. During the next two years, CAA hopes to convert its radio ranges to very high frequency, which permits static-free reception and makes available more transmission channels. CAA plans to install at all major airports instrument landing systems, which will enable the pilot to land in bad weather simply by following a pair of cross-pointers on his dashboard. Over a somewhat longer period, CAA hopes to perfect for civilian use radar devices to warn the pilot of approaching aircraft, and to give the airport tower man a picture of the traffic moving in his control zone.

"In the field of airports, Congress has just voted a $500,000,000 Federal-aid program, by which the CAA plans to assist local public agencies to build some 3,000 new airports and improve some 1,600 existing ones. Under this program, we hope to make flying convenient for the people in thousands of communities which thus far have been without air service.

"This program of modernization and airport construction will increase the government's expenditures for civil aviation," Mr. Burden said. "It will bring the average cost of CAA to date for each American up from 17 cents a year to an unheard of amount—all of 21 cents!"

April Count Shows 4,167 U. S. Airports

The latest quarterly compilation by the Civil Aeronautics Administration shows a total of 4,167 civil and military airports in operation in the United States as of April 1, 1946. This figure represents increases of 629 airports (18%) over April 1945, and 141 airports (4%) over January 1946. The number of airports controlled by the miltary services dropped 9% from 969 in April 1945 to 882 in April 1946. In contrast, commercial and municipal airports advanced from 2,195 to 2,894 (or 32%) in the same period.

While a certain portion of the gain in commercial and municipal airports was the result of the return of some airports from military to civil operation, the bulk of the expansion came about through construction of new commercial and municipally-operated airports. Despite wartime restrictions the number of civil airports continued to increase throughout World War II, and spurted after V-J Day.

To the private flier, the most significant figures in the table below are those which show, in terms of type of operation, the number of commercial and municipal airports; and, in terms of size, the number of airports below Class III. On April 1, 1946, there were 1,628 commercial airports; a year ago there were just 1,119. In the same period, municipal airports advanced from 1,076 to 1,266. This last April there were in operation 2,848 airports below Class III; a year ago there were only 2,244 airports in that same size category.

United States Airports by Type of Operation, by Size, and by State

April 1, 1946

State	Total	TYPE OF OPERATION					SIZE CLASSIFICATION				
		Commercial	Municipal	CAA Intermediate	Military[1]	All others[2]	Sub I[3]	I	II	III	IV & over
Total	4,167	1,628	1,266	214	882	177	475	1,247	1,126	486	833
Alabama	72	18	12	3	34	5	4	17	18	13	20
Arizona	97	26	24	10	23	14	5	21	34	13	24
Arkansas	62	30	14	2	12	4	11	15	13	7	16
California	307	107	64	12	100	24	25	77	79	29	97
Colorado	73	31	29	2	9	2	8	21	28	5	11
Connecticut	23	13	7	1	2	0	3	11	0	4	5
Delaware	10	4	1	0	4	1	1	3	3	0	3
District of Columbia	3	0	0	0	2	1	0	0	0	1	2
Florida	204	25	39	4	131	5	2	32	40	57	73
Georgia	96	25	18	9	38	6	10	16	21	14	35
Idaho	65	12	35	5	3	10	11	25	16	6	7
Illinois	125	71	18	6	21	9	13	40	52	11	9
Indiana	94	45	18	2	28	1	11	22	40	8	13
Iowa	96	59	29	4	3	1	19	39	28	4	6
Kansas	140	45	51	3	39	2	16	66	23	12	23
Kentucky	23	10	7	2	4	0	1	6	7	4	5
Louisiana	55	16	16	4	18	1	5	14	15	4	17
Maine	42	16	20	0	6	0	9	8	6	10	9
Maryland	38	24	3	1	9	1	3	13	9	5	8
Massachusetts	58	34	11	1	11	1	16	15	10	8	9
Michigan	161	47	94	1	13	6	11	71	50	14	15
Minnesota	67	29	34	2	1	1	8	30	19	5	5
Mississippi	62	17	22	6	16	1	4	12	17	14	15
Missouri	98	47	25	8	15	3	11	32	30	13	12
Montana	97	14	53	13	1	16	13	32	30	10	12
Nebraska	67	23	26	5	13	0	9	20	18	2	18
Nevada	45	13	10	8	12	2	4	11	6	6	18
New Hampshire	20	8	11	0	1	0	4	5	4	4	3
New Jersey	55	39	8	0	8	0	4	22	18	5	6
New Mexico	76	17	23	10	16	10	5	16	23	7	25
New York	179	113	41	4	13	8	45	71	26	18	19
North Carolina	104	54	22	1	26	1	27	27	14	15	21
North Dakota	41	7	28	6	0	0	2	13	17	3	6
Ohio	134	91	29	6	6	2	19	44	51	12	8
Oklahoma	139	53	43	4	38	1	17	51	36	11	24
Oregon	72	23	28	5	15	1	8	18	15	12	19
Pennsylvania	154	105	37	3	7	2	26	70	36	13	9
Rhode Island	7	3	1	0	3	0	3	0	0	2	2
South Carolina	61	15	21	2	21	2	6	16	12	6	21
South Dakota	35	9	19	2	5	0	1	12	12	2	8
Tennessee	38	12	14	7	5	0	2	4	15	6	11
Texas	389	142	106	22	101	18	33	92	123	47	94
Utah	41	5	23	8	3	2	1	12	10	7	11
Vermont	12	3	9	0	0	0	1	6	1	4	0
Virginia	79	36	19	4	19	1	8	30	18	8	15
Washington	105	32	40	3	23	7	16	29	20	8	32
West Virginia	33	19	11	2	1	0	7	8	12	3	3
Wisconsin	74	36	33	3	2	0	7	23	34	8	2
Wyoming	39	5	20	8	1	5	0	9	17	6	7

[1] Includes Army, Navy, Army operated, and Navy operated airports (the last two are commercial and municipal airports taken over by the Army or Navy during the wartime emergency).
[2] Includes private and miscellaneous government airports.
[3] Indicates airports which exist but do not come up to Class I standards.

Transatlantic Fares Proposed by Airlines Disapproved by CAB

The passenger fares and freight rates proposed for their transatlantic routes by the three U. S. members of the North Atlantic Traffic Conference—American Overseas Airlines, Transcontinental & Western Air, and Pan American Airways—have been disapproved by the Civil Aeronautics Board on the grounds that the rates are not related to the costs of operation.

Based on New York-Paris Fare—The carriers determined the fares between the United States and Canadian cities and European points on a mileage basis, using the present $375 fare between New York and Paris as the base rate. One of the most significant effects of the proposed rates is that they would raise Pan American's existing fare between the United States and the two important European gateway points of Shannon, Eire, and Lisbon, Portugal, the Board said.

In an earlier opinion the Board approved the conference method of rate-making adopted by the International Air Transport Association. Approval was limited to a one-year period pending Congressional authority for the CAB to set rates for U. S. air carriers operating internationally in the same way it now does for domestic carriers.

In the preceding opinion the Board stressed the necessity for relating rates to costs of operation. At their February conference the carriers had no cost data of any nature before them.

Carrier Experience—While recognizing that cost data may not be complete and conclusive for some time to come, the Board pointed out that the carriers have had ample experience for gauging reasonably accurate costs. Pan American has been operating four-engine equipment in overseas services for at least a decade, and over the Atlantic since 1939. American Overseas commenced transatlantic services under Navy contract in 1942, and has been conducting commercial transatlantic services since Jan. 1, 1945. TWA recently completed its 9500th crossing of the Atlantic under mail contract. All three of the carriers have conducted extensive overseas operations with four-engine landplane equipment for the Army.

The carriers convened for their second meeting June 3. At this meeting a report was scheduled to be given by a subcommittee appointed to study estimated and actual operating costs of transatlantic service. This work, the Board said, should produce data which will enable the conference to propose rates which will be economically sound.

In the meantime rates will continue as they are until a new rate is recommended by IATA which meets Board approval.

Safety Depends Upon Driver

The hazards of flying a personal airplane are much like the hazards of driving an automobile in that they greatly depend upon the operator. Most airplane accidents are avoidable and a large percentage are due to reckless flying. People do not forsake the automobile because of accidents due to reckless driving. They know from their own experience that these accidents are due to the driver, not the vehicle. As their knowledge of flying increases, either through personal contact or through the experiences of their relatives and friends, they will react similarly to airplane accidents.

Medal to T. P. Wright

Obverse **Reverse**

The Medal of Freedom, shown above, has been awarded by the War Department to T. P. Wright, Administrator of Civil Aeronautics, for his work as one of the directors of the Strategic Bombing Survey.

The citation accompanying the medal cites Mr. Wright's "exceptionally meritorious achievement which aided the United States in the prosecution of the war against the enemy as Director of the United States Strategic Bombing Survey in charge of the Aircraft Division from November 7, 1944 to September 2, 1945.

"He demonstrated great initiative in the organization and operation of a research group investigating the effects of strategic bombing in the German aircraft, V-weapon and light metals industries.

"He took part himself in field operations in Germany and in the interrogation of important enemy personalities, and worked tirelessly on the analysis of research findings, submitting to the War Department reports of great value in the planning of the air attack against Japan.

"Mr. Wright's services materially benefited military operations of the United States and its Allies."

Nunneley Succeeds Neal As General Counsel for Board

George C. Neal, for four years General Counsel of the Civil Aeronautics Board, has resigned his position with the Board, effective July 1, to enter the private practice of law. The Board appointed Emory T. Nunneley, now assistant general counsel, Finance Legal Division, to succeed Mr. Neal.

In accepting Mr. Neal's resignation the Board adopted a minute expressing its appreciation of his splendid services and its regret that the government is losing one who has made an outstanding contribution to civil aviation.

Mr. Neal came to the Civil Aeronautics Board when it was organized, in September 1938, as one of the Board's principal attorneys. In August 1939, he was promoted to assistant general counsel, and in January 1942, was appointed general counsel.

Mr. Nunneley, the newly-appointed general counsel, came to the Civil Aeronautics Board in May 1939, as an attorney and became assistant general counsel in charge of the legal phases of the Board's rate-making functions in October 1942. He served as an officer in the United States Navy from May 1944, to September 1945, and was attached to the contracts section of the Naval Air Transport Service. Upon his discharge from the Navy he returned to the Board in his capacity as assistant general counsel. Mr. Nunneley was born in Michigan, attended the University of Michigan, and graduated magna cum laude from Harvard Law School in 1933, serving on the editorial staff of the Harvard Law Review while in law school. Before his appointment with the Board Mr. Nunneley practiced law for five years with a prominent New York law firm.

Four New Local Carriers Recommended for Service In Texas-Oklahoma Area

Five local air carriers will serve the Texas-Oklahoma-New Mexico area if the Board follows the recommendations of Examiner Thomas L. Wrenn.

The report on the Texas-Oklahoma case issued recently recommends that certificates be given four new carriers, Central Airlines, Texas-New Mexico Airlines, Aviation Enterprise and Aircraft Sales Co., and the routes of Essair, present local carrier, be extended. The report also recommends that the routes of American, Eastern, Chicago & Southern and Braniff be amended.

Examiner Wrenn would authorize Central Airlines, an Oklahoma company, to serve cities in Oklahoma with lines extending to centers of population and business in adjacent states, and routes for Texas-New Mexico Airlines in the Texas Panhandle and New Mexico area. Aviation Enterprise is the examiner's selection for service mainly in the Rio Grande Valley and gulf coast section in Texas, and Aircraft Sales Co., for service in east and central Texas.

26 New Applicants—The Texas-Oklahoma proceeding includes the applications of 26 new companies seeking certificates and seven existing carriers seeking route extensions. Service has been proposed to around 368 cities, with first air service to 328 of these. Types of service considered in the report range from trunkline, local or within area, and feeder line service.

Best Type of Local Service—Examiner Wrenn advanced the premise that the best service from the standpoint of serving local needs can be obtained from a medium-sized operation with sufficient mileage and population to permit a spread of its cost, but which is still small enough to require and insure concentration on local service.

To allow for difficulties in getting operations started the report recommends that the temporary certificates of the local carriers run three years from the date the operations begin rather than from the date of issue. Essair's experience in being able to operate only one year and five months of its three-year certificate is given as an example of the delay that may result in acquiring equipment and meeting other problems.

Tarrington to Head Office Of International Activities

Harry G. Tarrington has been appointed Chief, Division of International Activities of the Civil Aeronautics Administration. He has been Liaison Officer in that Division, and succeeds Alfred Hand, named to the new position of Director, Plans and Performance Staff.

Replacing Mr. Tarrington as Liaison Officer is Colonel John P. Marshall, transferred from the CAA Office of Safety Regulation, where he had served as Coordinator of Safety Regulation since his release from the Army Air Forces at the beginning of this year.

Mr. Tarrington joined the CAA legal staff in June 1941, and was acting as Assistant General Counsel when he moved to the International Division. He served as United States Technical Expert at the Chicago International Civil Aviation Conference and was largely responsible for the Conference agreement on aircraft registration and identification marks.

Colonel Marshall entered the aviation field in 1928 with the Stinson Aircraft Corporation, was associated with some of the early commercial airline operations and served as assistant to the vice chairman of the Civil Aeronautics Board. As a colonel in the Air Forces, he handled important development work on military transport planes.

Public Must Demand Right Plane For Personal Flying, Says Geisse

We must clean up our airports and flying habits and demand quieter, safer airplanes able to land in small areas if the personal airplane is to get out of the roller coaster class and take instead its rightful place in our transportation system, John H. Geisse, Assistant to the CAA Administrator for Personal Flying Development, told the New York State Aviation Council, May 13, at its semi-annual meeting at Rye, N. Y.

With the birthday of the airplane not much later than that of the automobile, less than 10,000 airplanes were registered in 1939 against 30,000,000 automobiles, he stated.

Suitable Plane, More Trips—"We cannot excuse our failure by pointing out that 88 percent of automobile mileage is on trips for which the airplane is not suitable," he said. "In the first place, we have made little or no attempt to develop the airplane so that it is suitable for more of these trips. A roadable airplane which could be kept at home, and nearby airstrips, would have made the airplane equally as accessible as the automobile and useful over relatively short distances. In the second place, it would require 3,000,000 two-place airplanes, flying 10,000 miles a year, to provide the transportation making the 12 percent of automobile travel on trips of 200 miles or more."

Erected Own Hurdles—He pointed out that two hurdles which we have to get over—an increase in the number of airports and an improvement in their accessibility—are hurdles which we ourselves erected. One is the objection of citizens to their location in their vicinity and the other is the amount of land required.

"Our airports, in many cases, have been eyesores, our flying habits have been aggravating and most of our airplanes have been unnecessarily noisy. There is no use in our denying these facts. The public knows better—many from bitter experience. Our protestations that the airport and airplane can be good neighbors would fall on much more receptive ears if we were to demonstrate this to be a fact. Just so long as we continue to have airports all over the country which are not good neighbors, and just so long as we have pilots who give no consideration to people on the ground, it will be difficult to convince the public that if they will only let us put in another airport next to their homes things will be different.

"Airplanes could be built which would operate very satisfactorily from a single strip 150 feet in width and 300 feet in length, with 20 to 1 approaches, and which would not require a parking space of over 10 x 25 feet. Such airplanes could be landed on rooftops and could be kept at home on small estates. But they will not be built until we demand them. Such performance can only be obtained at a price, which may be in dollars or in the form of a sacrifice in some other characteristics, and the manufacturer must know that we are willing to pay that price before he spends his money on the necessary development work.

Build the Planes for the Fields—"In addition—and this is something which deserves your most careful consideration—the development of such airplanes can be very greatly retarded if they are forced to use fields large enough for our current types. The policy of some of recommending against the installation of small but conveniently located airports because they cannot be enlarged later, is diametrically opposed to the encouragement of the development of airplanes to use even smaller fields. I have already had the pleasure of flying one postwar model which could be landed and taken off with a ground run of not over 175 feet in still air.

"As we attempt to make airports more accessible we are immediately faced with the problem of finding suitable sites because of the acreage required and also the high cost of that acreage. The cost becomes increasingly important as the number and accessibility of airports are increased because this necessarily means fewer airplanes to each airport. In the matter of acreage required we have progressed backward through the years. The airplane of today can fly over, but not into or out of the field used by the Wright brothers to demonstrate the first airplane to the Army. The Bleriot which first crossed the English Channel had castered wheels and hence it could be readily landed cross wind. Our modern airplanes require an all-way field. This increases the acreage required about four times. In the very early days airplanes were built with wings which could be folded back, and the English have been using them for years. Our airplanes have fixed wings which increase the size of hangar required or parking space occupied about three times. When and if we get downtown landing facilities we are going to be faced with an impossible parking problem with our current designs.

Need Safer Planes—"Developing the airplane to use smaller fields and increasing the number of airports will have a material bearing on increasing safety, but that is not enough. We must make our airplanes safer and easier to fly. We could have done this years ago, but we didn't, and you can hardly blame the manufacturers for failing to do so. You were primarily responsible, because the manufacturers try to build what you want. Some of you said you did not want safer airplanes because if you taught a person to fly in one of them he would break his neck in some other plane more tricky. Carrying that trend of thought to its logical conclusion we should not build any airplanes safer than their predecessors. You got what you wanted, and in 1939, 43 percent of all nonscheduled flying was instructional. Do you think we can build an industry on any such record? How many automobiles do you suppose we would have if each driver accumulated total driving hours of only four or five times the hours he spent learning to drive?

"Many of you contended that flying an airplane was as easy and safe as driving an automobile. If so, how do you account for the fact that in 1942 there were about 50 fatalities per 100,000,000 passenger miles in nonscheduled flying as against 4.4 fatalities for the same number of passenger miles in automobiles in 1943. Perhaps you were confused with the 1943 airline record which was only 1.8 fatalities per 100,000,000 passenger miles.

"In addition to encouraging the manufacturer to build safer airplanes you can do your part in making cross-country flying safer by going all out on a state air marking program. Learning how to control the airplane is only one part of learning how to use it safely. It not only takes time to learn how to navigate the airspace, but the need for constant attention to navigation detracts materially from the pleasure of cross-country flying. The accident rate in cross-country flying as compared to the rate in local flying is such that at least one aviation insurance company is now giving consideration to placing higher premiums on cross-country insurance. Except for the danger attendant upon getting lost, cross-country flying might well be safer than local flying as it would get the pilots out of the vicinities of their girls' homes. Adequate air marking appears to be the best immediate solution of simplifying navigation for the novice pilot."

CAA's Blind Landing System Put into Use

(Continued from page 72)

A practical difficulty with radar at present is the necessity for crews on the ground to operate it. During the war the Army frequently used a crew of 16 men with each installation. Commercial manufacturers of the equipment say that crews of five men would be adequate, and they hope to be able to reduce this to a crew of two. This would involve a large increase in CAA personnel at airports if this type of radar were adapted to actual use now.

For keeping crews familiar with instrument landing, any system used will have to be kept in operation in good as well as bad or potentially bad weather. This will enable a pilot to make practice instrument approaches and landings even in "contact" weather. Thus four crews of two men each, to take the smallest estimate, would be required at each radar installation, to maintain continuous operation on the basis of eight-hour shifts and a 40-hour week. At 100 stations, this would involve 800 or more additional skilled airways workers for instrument landing alone. In addition, GCA in its present stage requires a great deal of maintenance.

CAA System Automatic—In contrast, the CAA system is automatic in operation. The man who maintains radio equipment around an airport can service the CAA equipment, and it is left turned on all the time, in good weather or bad.

Even during the war there were those who called for abandonment of the CAA's VHF system and immediate adoption of the radar system for civil use. However, the flying industry and the flying public are the bosses, indirectly, of the CAA. Anything presented for use along the airways must be acceptable to the pilots who use it, and it must contribute to the safety of the flying public. Airline pilots, through their association, the airlines, through their organization, Air Transport Association, and the airlines' mutual radio organization, Aeronautical Radio, now called Airinc, are agreed that radar should not be adopted without further study of its practicability and usefulness to air transportation. Pilots of American Airlines have been emphatic in urging the CAA not to run off after some new and promising development and leave them without a more immediate instrument landing solution.

Glare-absorbing Sun Glasses Described in Commerce Report

Glare-absorbing sun glasses which will be of aid to aviators are described in a report that is for sale by the Office of the Publication Board of the Department of Commerce.

"The lenses," says the report, "were developed under contract with the Office of Scientific Research and Development. The metallic film is Iconel, a chrome-nickel alloy. It was applied to the finished lenses by vacuum evaporation of the alloy.

"The glasses are needed in the operation of aircraft and land and water surface vehicles. The gradient density method takes care of the extreme fluctuations coming from highly reflective surfaces and at the same time gives optimum view in the areas of the lens not affected by the glare.

"The point of minimum density of the new lenses is at the visual center. The density is then graded vertically to the darker part of the lens. This eliminates any linear gradation which would give an unevenness to the fluctuations of brightness.

"The Iconel coating, first expected to be objectionable because of high reflectivity, has, instead, actually enhanced the appearance of the sun glasses, in the opinion of military users. The investigators say that they expect the gradient density sun glass will soon become standard equipment of the AAF."

Airline Pilot Misjudged Altitude—Contact with the water at more than normal landing speed and in a nose-low attitude is given by the Civil Aeronautics Board as probable cause of the failure of the hull and structure of the flying boat which crashed during a night landing of Pan American's Flight 161 at Port of Spain, Trinidad, B. W. I., Jan. 8, 1945. The accident resulted in fatal injuries to 23 of the 30 occupants, injuries to the survivors and complete loss of the flying boat. The flight was en route from Miami to Leopoldville, Belgian Congo, Africa.

Captain L. W. Cramer, first officer who was flying the plane from the left pilot's seat, misjudged his true altitude and failed to correct his altitude for a normal landing, the Board found.

Captain C. A. Goyette was in command of the flight. He was justified in directing Cramer to execute the approach and landing, the Board stated, but failed to exercise sufficient supervision of the landing. Goyette stated that his attention "was still in the cockpit" during the final stages of the landing when his responsibility required greater attention to the altitude of the aricraft and its relation to the water.

Both Goyette and Cramer were seasoned pilots in seaplane operations. However, Cramer's experience in the type of plane used included less than a two-hour company check-out at Miami and a portion of the flight time to Port of Spain.

At the time of the accident Cramer was not wearing glasses as required by his pilot certificate, a factor which may have contributed to his error in judgment of correct altitude just prior to impact.

Visibility was unlimited and satisfactory weather conditions prevailed. Neither malfunctioning of the plane nor collision with an object was discovered.

Captain Goyette stated that final approach was started at an altitude of 1,000 feet about three miles from the No. 1 light marking the beginning of the landing area. At about 300 feet Goyette noted the position of the aircraft as about one-half mile from the No. 1 light.

Soon after noting a 250-foot altitude with airspeed at 100 knots, Goyette heard what he described as a "tearing, shearing" noise, followed by a sudden lurch. As the plane came to an abrupt stop in the water, the hull broke in two and the plane sank immediately at a point one and one-fourth miles short of the No. 1 light.

The report pointed out the difficulty in judging altitude precisely above the surface of very smooth, glassy water, and the possibility that patches of glassy water existed at the time of the accident inasmuch as light winds prevailed and the landing area was on the lee side of hilly terrain. However, one occupant of the aircraft noted just prior to the landing that the surface was rippled. The existence of some rippled water plus the row of light markers should have assisted the pilots in making a normal smooth landing, the Board stated.

The approach, the Board concluded, was begun at too great a distance from the landing area, since the rate of descent and airspeed of the aircraft during the approach were not unusual, and the accident occurred one and one-fourth miles short of the first light. Approach from an altitude of 1,000 feet but at an excessive distance from the landing area would reduce the angle from which the row of lights was viewed by the pilots.

Struck Powerline Pole in Dark—Pilot William Mack Bryan, Jr., took off from Reno, Nev., with Mrs. Nina Thomas LaVelle on a cross-country charter flight to Vallejo, Calif. He stated that when he passed over Sacramento at an altitude of 5000 feet he was about fifteen minutes behind schedule but believed he could reach his destination before dark. Shortly after passing over Sacramento he became lost, having gone too far north of his course. As darkness descended he attempted to find a suitable place to make an emergency landing. One hour and twenty minutes after sunset he saw what appeared to him to be runway lights and circled to land. The left wing struck a power line pole and the plane crashed onto a gravel highway. Mrs. LaVelle was fatally injured and the pilot received cuts and bruises. The aircraft was extensively damaged.

The pilot stated that the aircraft and engine functioned normally throughout the flight. The plane was not equipped for night flying. A straw row running parallel to the road on which the crash occurred had been burned during the afternoon and some remaining fire along this row evidently accounts for the lights the pilot mistook for runway lights.

Bryan, 26, was certificated as a commercial pilot with single and multi-engine land ratings and had flown approximately 1300 hours, mostly on military aircraft. He had flown the type of aircraft involved slightly over 13 hours.

Low Flying, Stall, Fatal—Jack Dorice Dale, 23, of Eunice, New Mex., was killed in an aircraft accident that occurred on the government reservation near Camp Elliott near San Diego, Calif. A Navy enlisted man stationed at Camp Elliott, Dale held a student certificate and had flown solo about six hours, all in aircraft of the type involved. The plane was extensively damaged.

Dale took off solo from the Gibbs Airport for a local pleasure flight. Approximately 30 minutes later witnesses saw the plane being flown low and recklessly over the east end of nearby Camp Elliott. The barracks area was circled and the pilot turned south and was forced to climb because of rising terrain. A stall developed and the plane started a right spin which continued for about one turn. Partial recovery was effected at about the time the ground was struck while the plane was nose-down approximately 30°.

Investigation revealed no evidence of mechanical failure or malfunctioning of the aircraft prior to impact. There was ample fuel and the weather—ceiling and visibility unlimited, wind southwest 3-5 mph—was not contributory.

Half of Fatal Accidents Due to Stalls and Spins

About 50 percent of all our fatal airplane accidents in the prewar period were due to stalls and spins, according to John H. Giesse, assistant to the Administrator for Personal Flying Development.

Airplanes are on the market which cannot be stalled or spun and more will be offered before the year is up.

For all planes the accident record improved in the 1938-42 five-year period from 752,000 miles flown per fatal accident in 1938, to 2,207,000 miles in 1942. Taking the latter figure, and assuming all other factors to remain the same, a record of 4,000,000 miles per fatal accident might be expected for the stall- and spin-proof airplanes. Since the typical private pilot cannot be expected to fly more than 5,000 miles a year, it would take him 800 years to accumulate this mileage.

During the five-year period preceding 1942 over 55 percent of all accidents occurred during landing or taxiing. Improved undercarriages and improved visibility for the pilot when on the ground, now being provided on the postwar airplanes, will greatly improve this record. Airplanes with the tricycle undercarriage, as an example, were found to be much less susceptible to ground accidents than those with the more conventional undercarriage in studies made by the Office of Flying Safety of the Army Air Forces.

Performed for School Boys—During a flying demonstration over the public school grounds at Fayetteville, Ga., a 15-year-old school boy, Paul Rufus Walker, was struck and killed by an aircraft piloted by Joel T. Murphy, 20, teacher at the school and former AAF flier.

Around 60 boys had gathered on and near the school playground at the noon hour February 26 to watch the demonstration, after the subject of aviation had been discussed in class.

Pilot Murphy had engaged in a considerable amount of flying over Fayetteville at an altitude low enough for his passenger, Mrs. B. D. Murphy, Jr., a sister-in-law to recognize relatives on the ground. Witnesses at the scene of the accident stated that the aircraft had been flying in an exhibitionistic manner and had made at least one dive and pull-out at the school grounds prior to the accident. On the final dive the left wheel struck Walker, who with several others fell to a prone or kneeling position at the approach of the oncoming plane.

Murphy had flown about 330 hours, with 323 hours of this time in military aircraft. He held a commercial certificate with a single-engine land rating issued in 1945 following a written examination on the Civil Air Regulations, which included minimum flight altitudes, and presentation of evidence of military piloting ability.

He stated that while in a final turn of approximately a 70° bank, at an airspeed of about 65 mph and an altitude of 100 to 150 feet, the aircraft developed a high-speed stall and left wing dropped even lower. He explained that he dropped the nose, rolled the plane out and dived to regain control. At the bottom of this dive the landing gear struck something.

The Board report stated that to get as low as Murphy did and successfully climb out again in that particular direction would have required an airspeed at the bottom of the dive substantially above the aircraft's cruising speed. If, as Murphy stated, the aircraft did stall at 100 to 150 feet, it must have attained sufficient flying speed to permit recovery and level flight at an altitude considerably above the ground.

The Board gave as the probable cause of the accident misjudgment of distance during an exhibition of reckless, low flying.

Struck Wires; Landed on Ice—Collision with 30-foot high wires at the edge of Lake Sebago, Maine, resulted in injuries to three Portland, Maine, men. Thomas Francis Mannette and Robert Ripley were injured slightly and Bertram Warren received serious injuries. Both Mannette and Ripley were certificated as private pilots and each had flown approximately 80 hours. Warren was not certificated as an airman. The aircraft was extensively damaged.

Pilot Mannette took off from the Portland Municipal Airport with Ripley seated behind the other dual controls and with Warren in the third seat. He flew to Sebago Lake, some 30 miles distant, and upon arriving there descended to a very low altitude to examine the frozen surface of the lake to determine its suitability for landing. He then turned the controls over to Ripley who continued to fly toward the mouth of an inlet. Near the mouth of the inlet Ripley pulled up slightly and the plane struck a wire stretched across the inlet mouth. Mannette heard the impact, took over the controls, cut the throttle and started a sharp turn to the left toward an area where there was more room to land. During this turn the plane was stalled onto the ice, striking left wheel first and coming to rest right side up.

Investigation revealed no contributing factors to the accident from lack of fuel, state of the weather or any malfunctioning of the aircraft or its components.

Airline Orders

Service

No. 4675 consolidates for purposes of decision, applications of Lineas Aereas Taca de Colombia and Aerovias Nacionales de Colombia, S. A. for a foreign air carrier permit. (Apr. 19)

No. 4676 reopens proceeding concerning application of Aerovias Nacionales de Colombia, S. A. (Docket 1983) so that additional evidence in support of an amendment proposing another route between Barranquilla, Colombia and New York, N. Y. can be received. (Apr. 19)

No. 4679 consolidates applications of Catalina Air Transport and United Air Lines into one proceeding for hearing. (Apr. 23)

No. 4682 vacates order No. 4560 denying All American Aviation's application in Docket 2201; temporarily exempts All American from the provisions of sec. 401 (a) of the Civil Aeronautics Act, insofar as they would prevent All American from transporting mail and property between Parkersburg, W. Va., and Cincinnati, Ohio, via certain points, during such period as service to Huntington, W. Va., by other carriers is suspended. (Apr. 17)

No. 4683 temporarily exempts Inland Air Lines from the provisions of sec. 401 of the Act insofar as they would prevent Inland from transporting persons, property and mail between Pierre, and Sioux Falls, S. D.; denies application in all other respects. (Apr. 23)

No. 4684 denies petition of Northwest Airlines for leave to intervene in the aforementioned application (No. 4683). (Apr. 23)

No. 4690 orders that United Air Lines be notified that the national defense no longer requires a delay in inaugurating service to and from certain points in California on UAL's route 11. (Apr. 24)

No. 4694 permits American Airlines to inaugurate on April 28, nonstop service between El Paso and Abilene, Tex. on route 4. (Apr. 24)

No. 4696 authorizes Northeast Airlines to transport persons, property, and mail between Oak Bluffs, Nantucket, Hyannis, and Provincetown, Mass., intermediate points on its route 27. (Apr. 24)

No. 4697 grants Colonial Airlines permission to intervene in the application of Pan American Airways for a certificate—Docket 1803. (Apr. 24)

No. 4698 authorizes Pan American Airways to suspend service temporarily at Cat Cay, Bahama Islands. (Apr. 24)

No. 4699 permits Delta Air Lines to inaugurate on May 1, nonstop service between Knoxville, Tenn., and Greenville-Spartanburg, S. C., on route 54. (Apr. 24)

Nos. 4701, 4702, 4703, and 4704 temporarily exempt Stanley F. Chmiel, Merle W. Smith, Leon R. Alsworth, and Kenneth H. Armstrong, respectively, from the provisions of Sec. 401 (a) of the Act and from the regulations of the Board promulgated under Title IV of the Act, excepting Sec. 238.1, insofar as they would prevent the carriers from continuing to engage in transportation of the same nature, extent, regularity and frequency as was rendered by them within Alaska since (Chmiel) January 1945; (Smith) May 12, 1945; (Alsworth) March 1939; and (Armstrong) May 1944. (Apr. 26)

No. 4705 permits American Airlines to inaugurate on Apr. 28, nonstop service between Columbus and Cincinnati on route 22. (Apr. 26)

No. 4706 permits Northeast Airlines to serve Hyannis, Lawrence, Nantucket, New Bedford and Worcester, Mass., and Lewiston and Waterville, Me., on May 1, through the use of Hyannis, Lawrence Municipal, Nantucket, New Bedford Municipal, Worcester Municipal, Lewiston and Waterville Municipal Airports, respectively. (Apr. 26)

No. 4707 permits Pennsylvania-Central Airlines to serve Cheboygan, Saginaw-Bay City and Traverse City, Mich., on May 1, through the use of Emmet County, Tri-City and Traverse City Airports, respectively. (Apr. 26)

No. 4708 permits Pennsylvania-Central Airlines to inaugurate on May 1, nonstop service between Norfolk, Va., and Baltimore, Md., on route 14. (Apr. 26)

No. 4709 permits Transcontinental & Western Air to inaugurate on May 1, nonstop service between Rome, Italy and Cairo, Egypt, on flights serving Lisbon, Portugal and Madrid, Spain. (Apr. 26)

No. 4710 permits National Airlines to inaugurate on April 28, nonstop service between Miami, Fla., and New Orleans, La., and between Tampa, Fla., and New Orleans on route 39. (Apr. 26)

No. 4716 consolidates application of U. S. Airlines, Docket 2233, into the Boston-New York-Atlanta-New Orleans Case—Docket 730 et al. (Apr. 30)

No. 4719 grants petition of the City of Norfolk, Neb., for permission to intervene in the North Central Case—Docket 415 et al. (Apr. 30).

No. 4720 permits National Airlines to inaugurate on April 28, nonstop service between Orlando and St. Petersburg, Fla., on route 31. (May 1)

No. 4721 permits National Airlines to inaugurate on April 28, nonstop service between Norfolk, Va., and Charleston, S. C., on route 31. (May 1)

No. 4722 temporarily exempts Pan American Airways, from and after Apr. 29, from the terms, conditions and limitations of its temporary certificate authorizing operations between Manila, P. I. and Singapore, The Straits Settlements, insofar as they would otherwise prevent Pan American from operating between Manila and Singapore subsequent to Apr. 29, 1946. (May 1)

No. 4725 temporarily exempts Pan American Airways from the provisions of sec. 401 of the Act insofar as they would otherwise prevent Pan American from serving Santa Maria in lieu of Horta, The Azores. (May 2)

No. 4726 denies petition of Eastern Air Lines for revocation of Order No. 4549. (May 2)

No. 4727 dismisses, upon the request of Pan Atlantic Steamship Corp., their application—Docket 730. (May 2)

No. 4728 denies petition of the City of Anderson, S. C., which requested severance from the Southeastern States Case, and the issuance of a special report approving that portion of Eastern Air Lines' application which seeks authorization to serve Anderson as an intermediate point on route 5. (May 2)

No. 4729 dismisses, upon the request of Automatic Air Mail, their application Docket 415. (May 2)

No. 4730 grants the petition of Transcontinental & Western Air for leave to intervene in the application of Northwest Airlines—Docket 2018. (May 3)

No. 4731 severs that portion of the application of William Beatus, proposing transportation of persons, property, and mail between San Diego, Calif., and El Paso, Tex., via various intermediate points, from Docket 1489 and assigns Docket 2292; severs that portion of the application of Lucias S. Smith, proposing air transportation of persons, property, and mail between (a) Los Angeles, Calif., and Albuquerque, N. Mex., and (b) Los Angeles and El Paso, via various intermediate points, from Docket 1719 and assigns Docket 2293; severs that portion of the application of Silver States Airways, proposing air transportation of persons, property, and mail between Las Vegas and Las Vegas, Nev., via various intermediate points, from Docket 2135 and assigns Docket 2294; severs the portion of the application of Arizona Airways proposing transportation of persons, property, and mail between (a) Phoenix and Yuma, via Ajo, Ariz., (b) Phoenix and Phoenix, via various intermediate points, (c) Phoenix and Grand Canyon, via Winslow and Flagstaff, Ariz., (d) Phoenix and San Diego, via Yuma, Ariz., and El Centro, Calif., (e) Phoenix and El Paso, via various intermediate points, (f) Tucson, Ariz., and Albuquerque, N. Mex., and (g) Phoenix and Nogales, Ariz., via Tucson, from Docket 2223 and assigns Docket 2295; severs the portion of the application of Western Air Lines proposing transportation of persons, property, and mail between El Centro and El Paso, via various intermediate points, from Docket 2224 and assigns Docket 2296; severs the portion of the application of Western Air Lines, proposing air transportation of persons, property, and mail between Las Vegas and El Paso, via various intermediate points, from Docket 2226 and assigns Docket 2297; consolidates numerous other applications into one proceeding and assigns the proceeding for hearing before an Examiner of the Board; permits American, Braniff and Continental Airlines to intervene in the proceeding. (May 3)

No. 4733 denies petition of Midwest Airways for leave to amend its application in Docket 1272 and for further hearing thereon. (May 3)

No. 4734 denies motion of Continental Air Lines requesting that the North Central Case (Docket 415 et al) insofar as it involves applications for transportation between Denver and Chicago or Kansas City and Chicago, be consolidated for oral argument and decision with the Mississippi Valley Case—Docket 548 et al. (May 3)

No. 4735 grants the Cities of Burlington, Iowa and LaCrosse, Wis., and Columbian Airlines permission to intervene in the North Central Case. (May 3)

No. 4738 grants petitions of American, United, and Northwest Airlines, the Great Falls C. of C. and Minot Assn. of Commerce leave to intervene in the Chicago-Seattle Area proceeding—Docket 1602 et al. (May 7)

No. 4739 grants Westland Airlines leave to intervene in the Texas-Oklahoma Case—Docket 337 et al. (May 7)

No. 4740 permits the Cities of Peoria, Moline and Rock Island, Ill., Davenport, Iowa and the Peoria Assn. of Commerce permission to intervene in the North Central Case. (May 6)

No. 4741 grants Wien Alaska Airlines permission to intervene in the application of Roy H. Curtiss for a certificate authorizing nonscheduled transportation of mail and freight between Seattle and Nome via Ketchikan, Juneau, Anchorage, and Fairbanks, and 250-mile radius of these points—Docket 2152. (May 7)

No. 4742 dismisses, upon request of Inland Air Lines, its application for a permanent or temporary certificate—Docket 900. (May 7)

No. 4743 grants the City of Cleveland, Ohio, permission to intervene in the application of Trans-Canada Air Lines for a foreign air carrier permit authorizing transportation of persons, property, and mail between Toronto, Ontario, Canada, and Cleveland, Ohio—Docket 2254. (May 7)

No. 4744 grants the Cities of Chattanooga, Knoxville, Mobile, Norfolk, Pensacola and Richmond, the County of Allegheny, Pa., the Baltimore Assn. of Commerce, the Chambers of Commerce of Pittsburgh and Richmond, the Chamber of Commerce and Board of Trade of Philadelphia, Pa., the State of R. I., the Tri-City Airport Commission, and United Air Lines permission to intervene in the Boston-New York-Atlanta-New Orleans Case; denies the Cities of Buffalo, Dallas, Durham, Elizabeth City, Fort Worth, Laurel, Miss., Raleigh, Rochester and Youngstown, Ohio C. of C. permission to intervene in the same proceeding. (May 7)

No. 4745 denies petition of Mid-Continent Airlines for permission to intervene in the application as amended, of Northwest Airlines—Docket 2018. (May 7)

No. 4749 permits Colonial Airlines to serve Watertown and Massena, N. Y., on May 15, through the use of the Municipal Airport at each city. (May 8)

No. 4752 grants the petition of Lineas Aereas Taca de Colombia, S. A., permission to intervene in the application of Aerovias Nacionales de Colombia, S. A., for the issuance of a foreign air carrier permits—Docket 1983. (May 8)

No. 4753 permits American and Chicago and Southern Air Lines to intervene in the application of Eastern Air Lines for consolidation of the certificates for routes 10 and 40—Docket 1971. (May 10)

No. 4756 consolidates applications of Eastern and Delta Air Lines, Dockets 1971 and 2288, respectively, for hearing and decision. (May 10)

No. 4757 permits the City of Hastings, Nebr. to intervene in the North Central Case. (May 13)

Nd. 4758 consolidates applications of Linea Aerea TACA de Venezuela and Linea Aeropostal Venezolana for foreign air carrier permits—Dockets 2180 and 2281, respectively. (May 13)

No. 4759 consolidates applications of Duluth, Great Northern, G. I., and Western Air Lines and Herman O. Anderson and Harold W. Gunn for hearing. (May 13)

No. 4761 rescinds order No. 1777 which suspended service on American Airlines' route 7 at Niagara Falls, N. Y. and Wilkes-Barre, Pa. (May 8)

No. 4762 orders that Transcontinental & Western Air be notified service to and from Grand Canyon, Ariz., Columbia, Mo., and Lancaster, Pa., need no longer be delayed. (May 8)

No. 4763 rescinds order No. 1760 which suspended service on TWA's route 38. (May 8)

No. 4764 orders that Eastern Air Lines be notified service to and from Atlantic City, N. J., need no longer be delayed. (May 8)

No. 4765 orders that Northwest Airlines be notified service to and from Green Bay, Wausau and Eau Claire, Wis., need no longer be delayed. (May 8).

No. 4766 rescinds order No. 1748 which temporarily suspended service on Northeast Airlines route 27 at Lewiston-Auburn, Waterville, Millinocket and Caribou, Me. (May 8)

No. 4767 rescinds order No. 1802 which temporarily suspended service on Colonial Airlines' route 72 at Glens Falls, N. Y. (May 8)

No. 4768 rescinds order No. 1983 which temporarily suspended service on Braniff Airways' route 9 at Ponca City, Okla.

No. 4769 rescinds order No. 1803 which temporarily suspended service on Western Air Lines' route 19 at West Yellowstone, Mont. (May 8)

No. 4770 orders that Continental Air Lines be notified that service to and from Bartlesville, Okla., need no longer be delayed. (May 8)

No. 4771 rescinds orders Nos. 1756 and 2547 which temporarily suspended service on Mid-Continent Airlines' route 26 at Aberdeen, S. D., Bismarck-Manden and Minot, North Dakota, and St. Joseph, Mo. (May 8)

Miscellaneous

No. 4672 approves agreements by and between Delta Air Lines and Transcontinental & Western Air relating to sublease of ticket office space in Chicago. (Apr. 19)

No. 4677 approves an agreement by and between Pan American Airways and Aerovias Nacionales de Colombia, S. A., relating to handling, servicing, and care of Pan American aircraft at Barranquilla. (Apr. 22)

No. 4678 permits the City of Concord, N. H., to intervene in the application of Pennsylvania-Central Airlines for approval of proposed merger of Northeast Airlines with Penn-Central—Docket 2168. (Apr. 22)

No. 4695 permits the Cities of Lawrence and Worcester, Mass., to intervene in Docket 2168. (Apr. 24)

No. 4711 orders that order No. 4590, concerning The Aviation Corp.—Docket 2052—be vacated. (Apr. 26)

No. 4713 approves an agreement among American Overseas Airlines and certain other air carriers and foreign air carriers relating to the establishment of reservation procedures of transatlantic airlines. (Apr. 30)

No. 4717 permits the City of Portland, Me., to intervene in Docket 2168. (Apr. 30)

No. 4718 denies motion of Colonial Airlines for postponement of hearing on Docket 2168 and for oral argument in support of motion. (Apr. 30)

No. 4732 approves agreements by and between American Airlines and various other air carriers as members of the Air Traffic Conference of America, relating to resolutions of the Air Traffic Conference of America covering airline reservation, ticket, baggage procedures, guide publications, and custodial service of joint airport offices. (May 3)

No. 4736 modifies order No. 2673, relating to agreements between Pan American-Grace Airways and various foreign countries, by adding a proviso calling for the transmittal of copies of each agreement to the Provisional International Civil Aviation Organization for filing; modifies order No. 2674, relating to agreements between Pan American Airways and various foreign countries, by adding the same proviso. (May 6)

No. 4737 permits the City of Boston, Mass., and the International Assn. of Machinists to intervene in Docket 2168. (May 7)

No. 4748 approves certain agreements by and among American Overseas Airlines, Pan American Airways, Transcontinental & Western Air and certain foreign air carriers relating to the establishment of rates and general conditions of carriage in transatlantic air service; disapproves certain other agreements relating to above. (Issued with an opinion May 8)

No. 4750 approves an agreement by and between Pennsylvania-Central Airlines Corp., and various other air carriers, relating to the appointment of a committee to act for the air carriers in negotiations with airline pilots. (May 8)

No. 4751 consolidates Dockets 233 and 1939 concerning the "air travel card plan, government travel discount provision and other special tariff discounts of certain air carriers" and the "government travel discount provision and universal air travel plan of certain air carriers." (May 8)

Airman Orders

Suspensions

No. 4674 suspends commercial certificate of Frank G. Basham for 6 months because he flew an aircraft just above treetop levels and while flying at such an altitude struck a powerline. Basham and his passenger were severely injured and the aircraft destroyed. The passenger was not a certificated instructor rated for the airplane operated, contrary to the provisions of sec. 20.70 (b) of the Civil Air Regulations. (Apr. 19)

No. 4680 suspends private certificate of Stewart Hartshorn until Sept. 2 because he piloted an aircraft in a control area when he had not obtained a traffic clearance from the appropriate control center, contrary to the provisions of sec. 60.252 of the Regulations. Hartshorn also violated other provisions of the Regulations. (Apr. 22)

No. 4686 suspends commercial certificate with flight instructor rating of Wm. F. Furner for 6 months because he piloted an aircraft on an instruction flight with Waldon Ross as passenger, at an altitude of approximately 60 feet contrary to the provisions of sec. 60.3503 of the Regulations. (Apr. 24)

No. 4692 further suspends private certificate of Joseph S. Konkus for 90 days. The Administrator of Civil Aeronautics, on or about Nov. 1, 1945, effected an emergency suspension of his certificate which was not returned until Feb. 1, 1946. Konkus piloted an aircraft over a congested area of Corydon, Pa., the latter part of October, at less than 400 feet, contrary to the provisions of sec. 60.105(a) of the Regulations.

No. 4693 further suspends private certificate of Leo E. Scott for 90 days. The Administrator of Civil Aeronautics on or about Nov. 1, 1945, effected an emergency suspension of his certificate which was not returned until Feb. 1, 1946. Scott piloted an aircraft over a congested area of Corydon, Pa., the latter part of October, at less than 400 feet, contrary to sec. 60.105(a) of the Regulations. (Apr. 24)

No 4714 suspends commercial certificate with flight instructor rating of Clarence N. Van Deventer for 30 days. Van Deventer

(See Official Actions, page 81)

CAA and CAB Releases

Copies of CAA releases may be obtained from the CAA Office of Aviation Information. CAB releases are obtainable from the Public Information Section of the Board. Both offices are located in the Department of Commerce Building, Washington 25, D. C.

Administration

"Civil Aeronautics Administration Marks 20th Anniversary."

"CAA Head Explains Next Steps Under $500,000,000 Airport Bill."

"President Truman Congratulates CAA on 20th Anniversary."

"Preil New CAA Business Management Head: Stockburger Named Advisor to Wright."

"Walker Percy Named CAA-PICAO Coordinator."

"Wright Gets Medal for Bombing Survey Work."

"CAA Work on Instrument Landing System and GCA Radar."

"CAA Unveils First Radar-Equipped Control Tower for Civil Use: Expected to Increase Speed and Safety of Airport Traffic."

"CAA, States Work out Joint Air Safety Enforcement."

"CAA to Make Aviation Training Films Available to Schools, Clubs."

"Federal Airport Aid Applications May Start October 1, CAA Says."

"CAA Production Certificates to be Issued From Regions."

"N. Y. State Aviation Council Speech"—by John H. Geisse, Asst. to the Administrator for Personal Flying Development, before the New York State Aviation Council, Inc., May 13, at the Westchester Country Club, Rye, N. Y.

"The Federal Government and Civil Aviation"—by William A. M. Burden, Assistant Secretary of Commerce, Aviation Writers Association Annual Meeting, Indianapolis, Indiana, May 25, Columbia Broadcasting System, 10:45–11:00 p.m., EDT.

"Mileage and Traffic Statistics for Airlines for January, 1946."

Board

"Revenue Statistics for Airlines for December, 1945."

"Recommendation that state governments participate in enforcement of civil air regulation and investigation of private flying accidents."

"New Part 42, Civil Air Regulations, Nonscheduled Air Carrier Safety Rules."

"Part 50, Civil Air Regulations, Flying School Ratings."

"Resignation of George C. Neal, CAB General Counsel, and appointment of Emery T. Nunneley to succeed him."

"Service suspensions authorized during war for various reasons withdrawn by Board."

"Board disapproves agreements made by North Atlantic Traffic Conference of IATA setting transatlantic rates."

"Mileage and Traffic Statistics for Airlines for February, 1946."

"Board approves acquisition of Aerovias Braniff by T. E. Braniff."

"Additional air service to Latin America and Caribbean Area authorized by CAB."

"CAB decision in West Coast Case authorizing three new feeder airlines to provide local air service in California, Oregon, Washington and Idaho."

Air Regulations . . . *As of June 1, 1946*

Title	Part No.	Price		Date Latest Edition		No. Amendments Issued	
		Part	Manual	Part	Manual	Part	Manual
Aircraft							
Airworthiness Certificates	01	$0.05	None	10/15/42	None	1	.....
Type and Production Certificates	02	.05	$0.10	3/1/41	3/15/45	.....	.....
Airplane Airworthiness—Normal, Utility, Acrobatic, and Restricted Purpose Categories	03 [1]	Free	None	11/13/45	None	.....	.....
Airplane Airworthiness	04	.15	.45	11/1/43	7/1/44	3	2
Airplane Airworthiness Transport Categories	04–0 [1]	Free	None	11/9/45	None	.....	.....
Engine Airworthiness	13	.05	None	8/1/41	None	.....	.....
Propeller Airworthiness	14	.05	No stock	7/15/42	6/1/45	1	.....
Equipment Airworthiness	15	Free	No stock	4/15/44	7/1/38	1	.....
Radio Equipment Airworthiness	16	.05	No stock	2/13/41	2/13/41	.....	1
Maintenance, Repair, and Alteration of Aircraft, Engines, Propellers, Instruments	18	.05	.50	9/1/42	6/1/43	.....	.....
Airmen							
Pilot certificates	20	.05	None	7/1/45	None	2	.....
Airline Pilot Rating	21	.05	None	10/1/42	None	3	.....
Lighter-than-air Pilot Certificates	22	.05	None	10/15/42	None	1	.....
Mechanic Certificates	24	.05	None	7/1/43	None	1 [2]	.....
Parachute Technician Certificates	25	.05	None	12/15/43	None	1	.....
Traffic Control Tower Operator Certificates	26	.05	None	10/10/45	None	.....	.....
Aircraft Dispatcher Certificates	27	.05	None	10/1/43	None	3 [3]	.....
Physical Standards for Airmen	29	.05	None	1/10/46	None	.....	.....
Operation Rules							
Air Carrier Operating Certification	40	.10	None	10/10/44	None	7 [4]	.....
Scheduled Air Carrier Operations Outside Continental U. S.	41	Free	None	9/1/45	None	2	.....
Nonscheduled Air Carrier Certification	42	Free	None	8/1/46	None	.....	.....
General Operation Rules	43	.05	None	7/1/45	None	5	.....
Foreign Air Carrier Regulations	44	.05	None	7/1/45	None	.....	.....
Transportation of Explosives and other Dangerous Articles	49	.05	None	7/1/45	None	.....	.....
Air Agencies							
Airman Agency Certificates	50	Free	Free	4/30/46	4/1/46	.....	1
Ground Instructor Rating	51	.05	None	12/15/43	None	1	.....
Repair Station Rating	52	.05	Free	10/1/42	2/41	.....	.....
Mechanic School Rating	53	.05	No stock	8/1/42	5/40	.....	.....
Parachute Loft Certificates and Ratings	54	.05	None	1/21/43	None	.....	.....
Air Navigation							
Air Traffic Rules	60	.05	.15	8/1/45	10/45	2 [5]	.....
Scheduled Air Carrier Rules	61	.10	None	2/1/44	None	12 [6]	.....
Miscellaneous							
Rules of Practice Governing Suspension and Revocation Proceedings	97	Free	None	5/3/46	None	.....	.....
Definitions	98	.05	None	10/15/42	None	.....	.....
Mode of Citation	99	Free	None	11/15/40	None	.....	.....
Regulations of the Administrator							
Aircraft Registration Certificates	501	Free	None	3/31/43	None	.....	.....
Recordation of Aircraft Ownership	503	Free	None	3/31/43	None	.....	.....
Notice of Construction or Alteration of Structures on or near Civil Airways	525	Free	None	7/23/43	None	.....	.....
Seizure of Aircraft	531	Free	None	12/8/41	None	.....	.....
Reproduction and Dissemination of Current Examination Materials	532	Free	None	1/15/43	None	.....	.....

[1] Certain aircraft may comply with the provisions of this part or the 11/1/43 edition of Part 04. [2] Special regulations 340 and 340A. [3] Special regulation 355. [4] Special regulations 319, 319C and 361. [5] Special regulation 361. [6] Special regulations 323A, 323B and 361.

Note: Those parts and manuals for which there is a price are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances should be by check or money order, payable to the Superintendent. Currency is sent at sender's risk. Amendments and free Parts are obtained from the Publications Section, Civil Aeronautics Board, Washington 25, D. C.; free Manuals and Regulations of the Administrator from the CAA Office of Aviation Information, Dept. of Commerce, Washington 25, D. C.

Official Actions

(Continued from page 80)

permitted his student to maneuver an aircraft into a final approach for a landing resulting in a mid-air collision with another aircraft and also violated the provisions of sections 60.3401 and 60.341 of the Regulations. (Apr. 30)

No. 4715 suspends student certificate of William A. Latour for 90 days because he piloted an aircraft in the vicinity of municipal airport, Gulfport, Miss., closer than 500 feet to another aircraft in flight, contrary to the provisions of sec. 60.343 of the Regulations. (Apr. 30)

No. 4724 suspends mechanic certificate with A and E ratings of Charles L. McNeeley for 30 days because he executed a Periodic Aircraft Inspection Report representing an aircraft as airworthy when it was not. (May 1)

No. 4747 suspends commercial certificate with flight instructor rating of Ansel Joe Sides until Nov. 16, 1946, because he piloted an aircraft in practicing landings and take-offs at Tracy, Fld., Carlsbad, N. Mex., during the hours of darkness when the aircraft was not equipped with a certificated set of forward and rear position lights, contrary to the provisions of sec. 43.30 (b) (2) of the Regulations. Sides also violated other provisions of the Regulations. (May 7)

Revocations

No. 4673 revokes student certificate of Ivan F. Coppers because he flew over congested areas at altitudes which were (1) not sufficient to permit emergency landings, and (2) less than 1,000 feet above the ground, contrary to the provisions of sec. 60.105(a) of the Regulations. (Apr. 19)

No. 4688 revokes student certificate of Raymond S. Frasher because he piloted an aircraft in the vicinity of Gages airport, Mansfield, Ohio, and carried a passenger. Frasher also failed to make a written report of an accident without delay as required by sec. 01.30 of the Regulations. (Apr. 24)

No. 4689 revokes student certificate of Merton J. Carpenter because he performed aerobatics at altitudes between 400 and 700 feet, and over the congested area of San Jose, Calif., contrary to the provisions of sec. 60.104(b) of the Regulations. (Apr. 24)

No. 4712 revokes airman certificate of Oscar V. Wright. On Aug. 18, 1943, the Board revoked Wright's student certificate. He did not hold any certificate from that date until July 16, 1945 when he was issued a student certificate. On Oct. 15, 1945 Wright was issued a private certificate. During the time he held no ceritficate, Wright piloted various civil aircraft in the vicinity of Ronceverte, W. Va., on approximately 71 solo flights contrary to the provisions of sec. 60.30 of the Regulations. (Apr. 24)

No. 4746 revokes student certificate of William G. Putnam, Jr., because he carried a passenger, contrary to the provisions of sec. 43.50 of the Regulations. (May 7)

No. 4754 revokes student certificate of George V. Cooke because he carried a passenger, contrary to the provisions of sec. 43.50 of the Regulations. (May 10)

No. 4772 revokes airman certificate of Harry Allen Grant for 2 years from and after May 14, 1946. Grant, while the holder of a commercial certificate, on numerous occasions piloted an air-

(See Official Actions, page 83)

Domestic and Territorial Air Carrier Statistics

Operations for April 1946

Prepared from official reports submitted by the air carriers listed, to the Civil Aeronautics Board

Operator and routes	Revenue miles flown	Revenue passengers carried [a]	Revenue passenger-miles flown	Express and freight carried (tons)	Ton-miles flown		Passenger seat-miles flown	Revenue passenger load factor (percent)
					Express	Freight		
All American Aviation, Inc., Pittsburgh-Huntington, Jamestowa, Williamsport, Harrisburg, Philadelphia—**Total**	**148,710**	**0**	**0**	**5.7**	**747**	**0**	**0**	
American Airlines, Inc.—**Total**	**4,801,650**	**174,923**	**92,501,964**	**1,083.0**	**359,752**	**241,340**	**107,133,857**	**86.34**
Dallas-Los Angeles	1,526,940	32,543	28,493,507	117.0	83,742	57,704	32,690,426	87.16
Boston-Cleveland; New York-Chicago	845,533	44,236	17,671,570	382.0	105,625	64,363	20,797,830	84.97
Boston-New York	316,162	39,057	6,463,696	155.0	16,740	6,997	7,408,329	87.25
Cleveland-Nashville	89,961	7,009	1,705,079	39.0	5,066	2,708	1,876,716	90.85
New York-Ft. Worth or Oklahoma City	1,356,588	53,377	26,499,998	239.0	107,270	68,685	31,022,923	85.42
Washington-Chicago	162,024	7,870	2,720,460	37.0	10,180	3,763	3,268,746	83.23
Chicago-Ft. Worth	308,644	12,104	5,601,752	67.0	15,342	17,012	6,314,115	88.72
Buffalo-Toronto	11,868	2,732	189,819	3.0	189	0	253,230	74.96
El Paso or Ft. Worth-Mexico City	183,930	3,766	3,156,083	44.0	15,598	20,108	3,501,542	90.13
Braniff Airways, Inc.—**Total**	**839,448**	**36,971**	**15,543,032**	**121.5**	**35,028**	**19,507**	**17,129,125**	**90.74**
Chicago-Dallas	413,206	14,746	7,793,571	59.3	20,974	17,086	8,362,373	93.20
Denver-Brownsville; Amarillo-Memphis	392,342	21,860	7,097,202	49.2	13,092	2,280	8,068,058	87.97
Houston-Nuevo Laredo or Corpus Christi	33,900	1,501	652,259	13.0	962	141	698,694	93.35
Caribbean Atlantic Airlines, Inc., San Juan-Mayaguez & Christiansted—**Total**	**28,589**	**3,817**	**226,901**	**6.5**	**372**	**119**	**389,467**	**[58.26**
Chicago & Southern Air Lines, Inc.—**Total**	**642,827**	**27,783**	**11,357,076**	**89.7**	**33,332**	**0**	**13,458,147**	**84.39**
Chicago-New Orleans	379,354	17,967	6,798,140	55.4	21,494	0	7,966,183	85.34
Detroit-Houston	263,473	12,916	4,558,936	34.3	11,838	0	5,491,964	83.01
Colonial Airlines, Inc.—**Total**	**245,930**	**10,823**	**3,280,871**	**11.7**	**3,016**	**0**	**5,199,807**	**63.10**
New York-Montreal	199,566	9,564	2,871,574	10.4	2,824	0	4,226,163	67.95
Washington-Montreal	46,364	1,259	409,297	1.3	192	0	973,644	42.04
Continental Air Lines, Inc.—**Total**	**429,474**	**16,395**	**5,780,478**	**15.5**	**4,548**	**1,167**	**8,977,301**	**64.39**
Denver-El Paso-San Antonio	288,634	10,968	3,507,089	11.5	3,371	606	6,037,995	58.08
Pueblo-Tulsa	39,427	2,529	586,207	1.3	330	90	827,586	70.83
Denver-Kansas City	101,413	3,692	1,687,182	2.7	847	471	2,111,720	79.90
Delta Air Corporation—**Total**	**827,133**	**39,211**	**16,641,996**	**72.0**	**33,268**	**21,501**	**20,185,034**	**82.45**
Charleston or Savannah-Ft. Worth	490,950	28,156	9,320,635	40.0	16,187	11,384	11,700,194	79.66
Chicago-Miami	336,183	17,153	7,321,361	32.0	17,081	10,117	8,484,840	86.29
Eastern Air Lines, Inc.—**Total**								
Boston-San Antonio or Brownsville								
Boston or Detroit-Miami								
Chicago-Jacksonville								
Atlanta-Miami; Tallahassee-Memphis								
Washington-St. Louis								
Essair, Inc., Houston-Amarillo—**Total**	**80,921**	**1,608**	**471,520**	**1.8**	**595**	**0**	**728,289**	**64.74**
Hawaiian Airlines, Ltd., Honolulu-Hilo & Port Allen—**Total**	**132,210**	**17,211**	**2,485,532**	**218.8**	**9,486**	**24,961**	**2,833,104**	**87.73**
Inland Air Lines, Inc.—**Total**	**165,921**	**6,162**	**1,636,408**	**5.5**	**1,213**	**0**	**2,723,696**	**60.08**
Denver-Great Falls	107,561	5,337	1,309,965	4.6	1,030	0	2,099,715	62.39
Cheyenne-Huron	58,360	1,475	326,443	.9	183	0	623,981	52.32
Mid-Continent Airlines, Inc.—**Total**	**409,706**	**21,243**	**6,189,606**	**28.0**	**10,205**	**0**	**8,103,226**	**76.38**
Minneapolis-New Orleans	285,998	14,734	4,322,326	23.6	8,918	0	5,613,546	77.00
Minneapolis-St. Louis-Kansas City	123,708	6,844	1,867,280	4.4	1,287	0	2,489,680	75.00
National Airlines, Inc.—**Total**	**767,526**	**23,708**	**14,541,499**	**46.7**	**34,553**	**0**	**16,515,974**	**88.05**
New York-Key West via Miami	614,157	20,496	12,624,077	40.2	31,976	0	14,420,004	87.55
Jacksonville-New Orleans	153,369	4,554	1,917,422	6.5	2,577	0	2,095,970	91.48
Northeast Airlines, Inc., New York-Caribou-Montreal; Burlington-Montreal; Bangor-Moncton—**Total**	**265,559**	**26,211**	**5,293,996**	**24.3**	**4,293**	**0**	**6,373,416**	**83.19**
Northwest Airlines, Inc.—**Total**	**1,450,432**	**49,425**	**27,912,130**	**144.8**	**80,528**	**0**	**31,688,996**	**88.08**
Chicago-Seattle; Fargo-Winnipeg	1,016,580	41,114	18,944,876	103.6	54,451	0	21,556,505	87.88
Minneapolis-Duluth	15,552	1,847	250,992	.8	120	0	324,144	77.43
Minneapolis-New York	418,300	12,218	8,716,262	40.4	25,957	0	9,808,347	88.87
Pennsylvania-Central Airlines Corporation—**Total**	**1,479,267**	**105,366**	**31,774,081**	**321.0**	**74,575**	**0**	**39,620,471**	**80.20**
Norfolk-Detroit	686.985	67.922	15.625.912	147.0	30.462	0	19.818.858	78.84
Detroit-Milwaukee or Chicago	391.073	37.356	8.032.514	99.0	22.603	0	9.951.219	80.72
Washington-Buffalo	58.272	3.771	962.018	11.0	1.949	0	1.253.423	76.75
Pittsburgh-Buffalo	34.130	3.050	558.262	8.0	1.177	0	715.549	78.02
Norfolk-Knoxville	55.843	3.314	854.778	8.0	1.590	0	1.193.229	71.64
New York-Birmingham	252.964	16.099	5.740.497	48.0	16.794	0	6.688.193	85.83
Transcontinental & Western Air, Inc.—**Total**	**3,521,521**	**85,577**	**71,056,988**	**854.0**	**344,341**	**150,231**	**80,807,749**	**87.93**
New York-Los Angeles	2,223,228	58,082	44,198,135	517.0	239,286	93,657	49,067,157	90.08
Dayton-Chicago	77,671	5,319	1,022,777	14.0	8,018	2,925	1,516,226	67.46
Winslow-San Francisco	246,750	11,875	4,112,271	39.0	10,387	4,047	5,348,627	76.88
New York-Chicago-Kansas City	648,669	25,396	16,118,287	207.0	71,435	39,205	18,305,241	88.05
St. Louis-Detroit via Cincinnati & Dayton	169,410	9,907	2,874,213	60.0	10,125	7,936	3,326,720	86.40
Washington-Dayton via Columbus	95,543	5,211	1,732,764	8.0	2,516	719	1,994,160	86.89
Pittsburgh-Boston	60,250	2,709	998,541	9.0	2,574	1,742	1,249,618	79.91
United Air Lines, Inc.—**Total**	**4,490,871**	**140,621**	**83,850,788**	**809.0**	**420,495**	**254,784**	**97,636,031**	**85.88**
New York-Oakland	3,019,376	73,437	54,793,561	525.0	321,812	191,571	64,285,348	85.23
Salt Lake City-Seattle	293,266	12,587	4,582,747	56.0	46,417	9,190	5,418,224	84.58
Seattle-San Diego	963,001	54,739	20,826,204	195.0	42,288	52,248	23,571,921	88.35
Denver-Cheyenne	11,520	782	75,072	2.0	39	159	241,318	31.11
Seattle-Vancouver	22,320	3,449	420,248	9.0	1,110	1	484,634	86.71
Washington-Toledo	89,088	4,003	1,556,944	6.0	2,193	218	1,806,292	86.20
Cleveland-Boston	92,300	3,355	1,596,012	16.0	6,636	1,397	1,828,294	87.30
Western Air Lines, Inc.—**Total**	**669,979**	**34,952**	**13,130,213**	**101.4**	**25,610**	**7,577**	**16,268,271**	**80.71**
San Diego-Salt Lake City	293,673	16,153	5,058,673	43.9	15,368	0	6,292,708	80.39
Salt Lake City-Great Falls	67,368	2,954	922,559	11.9	2,684	0	1,408,073	65.52
Great Falls-Lethbridge	9,779	646	92,313	.6	83	0	193,641	47.67
Los Angeles-San Francisco	249,129	14,359	5,130,097	43.9	6,725	7,577	6,215,807	82.53
Los Angeles-Denver	50,030	2,717	1,926,571	1.1	750	0	2,158,042	89.27
Total								

[a] The total passengers carried for each airline is an unduplicated figure.

Domestic and Territorial Air Carrier Statistics—Concluded

Operations for the first four months of 1946 as compared with the same period of 1945

Operator	Revenue miles flown January–April		Revenue passengers carried (unduplicated) January–April		Revenue passenger miles flown January–April		Express and freight carried (tons) January–April	
	1946	1945	1946	1945	1946	1945	1946	1945
All American Aviation, Inc.	536,265	433,775	0	0	0	0	15.0	24.2
American Airlines, Inc.	18,155,727	13,199,720	577,889	347,117	323,603,672	207,192,962	3,581.0	5,156.4
Braniff Airways, Inc.	3,291,837	2,271,745	139,574	91,035	57,743,010	38,516,391	471.4	358.6
Caribbean Atlantic Airlines, Inc.	113,623	66,651	15,134	6,172	903,402	439,948	28.8	48.5
Chicago & Southern Air Lines, Inc.	2,331,429	1,312,542	95,364	44,365	39,178,677	19,760,574	315.7	289.5
Colonial Airlines, Inc.	764,206	624,262	37,584	20,123	11,352,108	6,116,569	38.7	34.4
Continental Air Lines, Inc.	1,513,866	926,038	54,781	27,939	20,354,180	10,395,953	54.9	76.3
Delta Air Corporation	2,875,050	1,614,655	128,919	71,856	53,519,384	28,036,280	262.0	207.5
Eastern Air Lines, Inc.	.....	7,433,089	.....	240,268	.....	123,986,324	.....	1,428.5
Essair, Inc.	278,668	–	4,968	–	1,447,592	–	4.0	–
Hawaiian Airlines, Ltd.	493,569	330,755	66,747	40,574	9,601,243	5,787,183	771.6	1,107.3
Inland Air Lines, Inc.	646,573	509,967	22,454	17,552	6,176,331	5,257,969	17.6	15.5
Mid-Continent Airlines, Inc.	1,461,793	842,219	69,790	33,118	21,225,297	8,604,949	104.3	70.1
National Airlines, Inc.	2,486,256	1,611,917	68,343	44,500	39,053,011	19,463,240	124.3	86.7
Northeast Airlines, Inc.	974,515	395,365	88,629	23,487	18,175,684	4,859,494	74.0	32.3
Northwest Airlines, Inc.	5,202,534	2,983,299	150,593	78,907	90,828,680	48,708,533	464.0	479.9
Pennsylvania-Central Airlines, Inc.	5,055,321	2,734,827	331,557	188,399	96,405,821	41,136,479	1,067.0	1,375.4
Transcontinental & Western Air, Inc.	12,705,615	8,421,383	257,128	140,010	227,660,249	126,554,503	2,816.0	3,154.9
United Air Lines, Inc.	15,866,162	10,803,834	420,087	177,173	258,722,090	151,189,357	2,190.4	2,027.3
Western Air Lines, Inc.	2,486,338	1,449,198	121,649	58,169	44,590,604	24,573,896	303.4	213.1
Total	.....	59,577,158	.....	1,650,764	.....	870,580,604	.....	16,186.4
Index (1945 = 100)	.....	100.00	.....	100.00	.....	100.00	.....	100.00

Operator	Ton miles flown				Passenger seat-miles flown January–April		Revenue passenger load factor (percent) January–April	
	Express January–April		Freight January–April					
	1946	1945	1946	1945*	1946	1945	1946	1945
All American Aviation, Inc.	1,938	4,088	0	–	0	0	–	–
American Airlines, Inc.	1,179,959	2,360,937	809,305	–	370,630,591	235,398,763	87.31	88.02
Braniff Airways, Inc.	152,147	170,049	45,156	–	66,139,621	45,069,880	87.30	85.46
Caribbean Atlantic Airlines, Inc.	1,436	3,866	808	–	1,710,216	582,444	52.82	75.53
Chicago & Southern Air Lines, Inc.	115,974	117,832	0	–	48,676,068	27,192,007	80.49	72.67
Colonial Airlines, Inc.	9,766	10,056	0	–	16,053,139	8,790,102	70.72	69.58
Continental Air Lines, Inc.	17,988	33,541	3,495	–	31,367,130	13,834,245	64.89	75.15
Delta Air Corporation	125,068	78,691	21,501	–	64,819,007	33,417,263	82.57	83.90
Eastern Air Lines, Inc.	.....	779,439	.....	–	.....	143,407,075	.....	86.46
Essair, Inc.	1,380	–	0	–	2,508,012	–	57.72	–
Hawaiian Airlines, Ltd.	31,811	170,463	87,597	–	10,514,040	6,112,272	91.32	94.68
Inland Air Lines, Inc.	3,866	3,659	0	–	10,319,939	7,969,703	59.85	66.97
Mid-Continent Airlines, Inc.	38,835	19,901	0	–	27,299,779	13,714,504	77.75	62.74
National Airlines, Inc.	68,392	39,677	0	–	43,551,656	21,318,748	89.67	91.30
Northeast Airlines, Inc.	13,198	6,111	0	–	23,103,819	8,783,991	78.67	55.32
Northwest Airlines, Inc.	272,284	251,848	0	–	105,315,143	58,182,637	86.24	83.72
Pennsylvania-Central Airlines, Inc.	253,098	284,516	0	–	121,690,082	55,673,819	79.22	73.89
Transcontinental & Western Air, Inc.	1,211,269	1,618,945	423,114	–	258,977,618	144,062,161	87.91	87.91
United Air Lines, Inc.	1,421,384	1,558,079	661,350	–	301,086,887	160,295,510	85.93	94.32
Western Air Lines, Inc.	88,932	94,674	14,413	–	55,934,767	28,811,324	79.72	85.29
Total	.....	7,606,372	.....	–	.....	1,012,616,448	.....	85.97
Index (1945 = 100)	.....	100.00	.....	–	.....	100.00	.....	100.00

	January	February	March	April	Total
Passengers carried (unduplicated) total revenue and non-revenue	661,480	667,376	828,276	.....	.....
Passenger miles flown (total revenue and non-revenue)	336,897,337	337,356,042	413,367,422	.....	.....

* Express and freight ton-miles combined under express. Not reported separately prior to July 1945.

Note.—Effective January 1, 1946, all revenue traffic statistics are reported to the CAB on the basis of direct airport-to-airport distances. For purposes of comparability, those traffic statistics reported prior to that date on the basis of course-flown distances have been converted to reflect direct airport-to-airport distances.

Official Actions

(Continued from page 81)

craft equipped with a 125 hp engine and carried passengers, when neither he nor his passengers were certificated for such operation, contrary to the provisions of sec. 20.70 (b) of the Regulations. Grant also violated sec. 60.331. On January 3, 1945, he was given a flight test and among the maneuvers he was instructed to execute were accuracy landings. In attempting to perform the maneuvers he stalled the plane at an altitude of approximately 20 feet and crash landed about 100 feet outside the airport boundary. Grant was charged and convicted on several occasions for reckless driving of an automobile and for operating a motor vehicle while under the influence of intoxicating liquor. Paragraph 7 of the Board findings states that in committing these acts Grant "demonstrated a willful disregard for the laws enacted for the safety and protection of the public." (May 14)

Miscellaneous

No. 4681 dismisses complaint of the Administrator of Civil Aeronautics concerning the student certificate held by Lewis L. Rabbitt. (Apr. 22)

No. 4685 dismisses Administrator's complaint concerning the mechanic certficate held by Roy M. Lamoureaux. (Apr. 24)

No. 4687 dismisses proceedings against Leroy Mills who holds a commercial certificate with flight instructor rating. (Apr. 24)

No. 4691 orders that a third-class medical certificate be issued to —— ——,* provided he also meets the other requirements necessary. (* It is Board policy to omit names when physical disability is involved.) (Apr. 24)

No. 4700 denies petition of Lee S. Walker requesting that the skill requirement of sec. 20.26 (a) (6) of the Civil Air Regulations be waived. (Apr. 24)

No. 4723 amends order No. 4359 to read that Carl Barge Wiemann "shall not be issued any type of airman certificate prior to Sept. 6, 1946." (May 1)

No. 4755 denies petition of John S. Steber for reconsideration of the Board order which revoked his private certificate. (May 10)

Regulations

Amdt. 40–3 ..... *Effective May 17, 1946*

Route and Definition of Route—Part 40 of the Civil Air Regulations is amended as follows:

1. By amending §40.11 to read as follows.

40.11 Route. Applicant shall show that the route over which it proposes to operate is, or prior to operation will be, equipped with such navigational facilities (including terrain and intermediate airports, emergency landing fields, and ground aids to air navigation) as are determined by the Administrator to be necessary for safe operation as related to the service offered.

2. By adding a new section to read as follows:

40.110 Definition of Route. A route is that portion of the navigable airspace designated by the Administrator which is to be used by the air carrier in scheduled air transportation.

Amdt. 40–4 ..... *Effective May 17, 1946*

Pilot Route Qualification—Part 40 of the Civil Air Regulations is amended as follows:

1. By amending §40.2611 (b) to read as follows:

40.2611 (b) Requirements for pilot route qualifications. The air carrier shall be responsible for qualifying each first pilot for the route over which he is to fly aircraft in scheduled air transportation as first pilot. Such qualification shall include a thorough knowledge of all of the instrument approach procedures, the terrain, any obstructions or congested areas, and the physical layout of the airport and approaches at each regular, provisional, refueling and alternate airport approved for the route. It shall also include the navigational facilities, communications procedures, minimum safe flight levels, position reporting points, holding procedures, and all other traffic control procedures for the route. In complying with the foregoing requirements the air carrier shall establish a detailed qualifying procedure, including flight over the route, which shall be performed by the pilot qualifying for the route. Such procedure shall be submitted for the approval of the Administrator and when approved by him shall be made a part of the air carrier operating certificate. A pilot may be listed in the air carrier operating certificate as first pilot for the route when the air carrier has certified to the Administrator that the pilot has performed the qualifying procedures and is qualified for the route, and this certification is endorsed by the pilot.

2. By repealing §40.2614 (e).

Amdt. 40–5 ..... *Effective May 17, 1946*

Radio Facilities and Equipment—Part 40 of the Civil Air Regulations is amended as follows:

1. In §40.305 strike the words "regular or alternate."
2. In §40.335 strike the words "regular or alternate."

Acceptance of Bids For Airport Project Aid May Start Oct. 1

Regional and district offices of the Civil Aeronautics Administration may begin accepting preliminary applications for government assistance under the Federal Airport Program about October 1, according to Charles B. Donaldson, Assistant Administrator for Airports.

Waiting Appropriation—Congress has authorized—but not yet appropriated—$500,000,000 to be used for airport improvement and construction in the next seven years. No more than $100,000,000 may be appropriated in any one year. The money is to be matched by units of local government.

Five percent of the $500,000,000, or $25,000,000, is to be used for administration. The balance, $475,000,000, is to be divided as follows: 25 percent, or $118,750,000, for a discretionary fund to be used by the Administrator of Civil Aeronautics in carrying out the National Airport Plan, regardless of state lines; and the balance, or $356,250,000, to be apportioned by states on an area-population basis.

Each state's share is to be determined by its population and area, as compared with the population and area of the entire country. Population and area count equally.

Must Make New Survey—The Federal Airport Act provides for a complete survey of airport needs throughout the country, and preparation of an up-to-date National Airport Plan. An appropriation of $3,000,000 for this survey is expected at this session of Congress. The survey must be made before applications can be considered.

Pending this appropriation, CAA airport officials from all parts of the country are busy in Washington drafting tentative regulations for operation of the airport program. Supervisors of airport work in the CAA's seven regions are attending the meeting. The preliminary draft of these regulations will be submitted to federal, state, and municipal aviation officials for comments and suggestions before the final draft is adopted.

The Federal Airport Program will be decentralized as much as possible to avoid concentrating responsibility and administrative detail in Washington. To do this, an average of one district office will be established in each state.

Takes Time—Several months will be required to establish the machinery and build up the organization for carrying out the airport program. Preliminary applications can be received and a 1947 construction program formulated as soon as the National Airport Plan is prepared.

Officials of cities and other government agencies interested in participating in the plan should keep in touch with regional and district CAA offices for instruction and advice.

State Portions—The following list shows the amount which will go to each state under the population-area formula:

Alabama, $6,874,077; Arizona, $7,388,661; Arkansas, $5,766,751; California, $18,697,066; Colorado, $7,663,436; Connecticut, $2,607,586; Delaware, $481,764; District of Columbia, $901,112; Florida, $6,018,106; Georgia, $7,695,709; Idaho, $5,634,509; Illinois, $14,007,502; Indiana, $6,776,014; Iowa, $6,750,695; Kansas, $7,285,422; Kentucky, $6,230,312; Louisiana, $6,057,620; Maine, $3,103,678; Maryland, $3,087,175; Massachusetts, $6,326,381; Michigan, $10,541,544; Minnesota, $8,732,048; Mississippi, $5,766,437; Missouri, $9,226,226; Montana, $9,428,452; Nebraska, $6,332,068; Nevada, $6,663,841; New Hampshire, $1,213,277; New Jersey, $6,089,775; New Mexico, $7,889,865; New York, $21,156,642; North Carolina, $7,938,360; North Dakota, $5,033,080; Ohio, $11,774,192; Oklahoma, $7,281,468; Oregon, $7,189,743; Pennsylvania, $16,064,883; Rhode Island, $1,036,577; South Carolina, $4,400,329; South Dakota, $5,410,591; Tennessee, $6,434,388; Texas, $24,433,789; Utah, $5,749,013; Vermont, $1,052,284; Virginia, $6,027,989; Washington, $6,367,666; West Virginia, $3,998,144; Wisconsin, $7,554,042; Wyoming, $6,109,791.

The President Signs the Federal Airport Act

Shown with President Truman when he signed the Federal Airport Act are (left to right) Senator Pat McCarran; Representative Jennings Randolph; Second Assistant Postmaster General Gael E. Sullivan; Representative A. L. Bulwinkle; Assistant Secretary of Commerce William A. M. Burden; Civil Aeronautics Administrator T. P. Wright; CAA Assistant Administrator for Airports Charles B. Donaldson, and, in foreground, Civil Aeronautics Board Chairman L. Welch Pogue.

Production Certificates Will Be Issued from Regional Offices

In a move to speed up the issuance of production certificates to aircraft manufacturers, such certificates will be issued in the future from the regional offices rather than from Washington. The CAA production certificate indicates satisfactory facilities, materials, quality control and organization.

The new method will cut down the time between the approval of manufacturing facilities and the actual issuance of the certificate. Procedures and instructions have been established by the Washington office of the Manufacturing Inspection Division of CAA, and the new plan will go into effect as soon as they have been printed and delivered to the regional offices.

The plan is another step by CAA to streamline methods of certification wherever possible. In a related move several months ago, CAA authorized the appointment of designated manufacturing inspection representatives from the staffs of manufacturers holding CAA production certificates. These designated representatives perform many of the detailed duties formerly carried out by the regular CAA factory inspector. The CAA inspectors spot-check the work of the designated inspectors, but are now able to spend more time in assisting smaller factories.

CAA Makes 31 Training Films Available to Clubs and Schools

Aviation training films soon will be available at 29 Civil Aeronautics Administration Airway Traffic Control Centers for use by schools, flying clubs, and various civic and aeronautical organizations.

Gathered by the CAA Office of Aviation Training in collaboration with the Office of Federal Airways, these films will cover a wide range of training subjects in most fields of aviation. They consist of film strips for use in 35 millimeter projectors, and 16 millimeter movies. A list of 31 such subjects now is available from the Office of Aviation Training in Washington, and will be sent upon request. Eventually, it is hoped additional subjects will be available as a result of negotiations by the CAA with the Army and Navy for films which they prepared in their comprehensive wartime training activities.

The first group of film centers to be established are at Fairbanks, Alaska; Seattle, Wash., Los Angeles, Calif.; Denver, Colo.; Fort Worth, Tex.; Kansas City, Mo.; Chicago, Ill.; Atlanta, Ga.; Washington, D. C.; and New York, N. Y. The address in each case is Airway Traffic Control Center, Civil Aeronautics Administration.

Films will be available on a loan basis to any who are concerned with aviation training. This includes the high schools which now give aeronautical courses, commercial airlines, industries conducting aviation training classes, flying clubs, engineering and scientific societies and civic and business organizations.

While the primary use of these films will be in CAA in-service training courses, the CAA believes that the loan program will further aviation training, extend the public's knowledge of aeronautics, and improve the efficiency and safety of aircraft operation and control.